Summer 2025

UPDATES: RESEARCH AND RESOURCES

UC San Diego
SCHOOL OF MEDICINE
SHILEY-MARCOS ALZHEIMER'S
DISEASE RESEARCH CENTER

CURRENTS

Volunteer Spotlight: Meet Genell Greenberg

By Vidushi Sharma

Have you ever met someone with a genuine passion for helping others and whose commitment to their work inspires you to do more for your community? I recently had the privilege of interviewing someone like this, an attorney/social worker named Genell Greenberg. From the moment we began our conversation, her sense of purpose struck me. Ms. Greenberg shared her experiences and insights into the challenging but rewarding world in which she volunteers. I was amazed by her stories and the impact that she has made on the lives of those she serves.

The Lewy Body Dementia Support Group at the Shiley-Marcos Alzheimer's Disease Research Center is a community that provides a supportive space for individuals and families affected by Lewy Body Dementia. Ms. Greenberg was inspired to get involved based on her personal experience as a care partner for her late husband who had this disease. She recognized that she could offer others in a similar situation the support they need, and now leads the monthly support group sponsored by the Lewy Body Dementia Association and the Shiley-Marcos ADRC for people with Lewy Body Dementia. She understands the challenges faced by individuals with dementia and their caregivers and emphasizes the importance of empathy and kindness in such situations. She believes caregivers benefit tremendously by

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UCSD Shiley-Marcos Alzheimer's Disease Research Center Research Procedures and Return of Results

UC San Diego has proudly been a National Institute on Aging Alzheimer's Disease Research Center of Excellence for 40 years since their original inception. NIA-designated Alzheimer's Disease Research Centers (ADRCs) serve as a national resource for research on the nature of Alzheimer's disease (AD) and AD-related dementias (ADRD) and the development of more effective approaches to prevention, diagnosis, care, and therapy. They create shared resources that support dementia-relevant research. Although each center has its own area of emphasis, the ADRCs also enhance research on Alzheimer's disease as a network that shares new research ideas and approaches as well as data (through the National Alzheimer's Coordinating Center), biological samples (through NCRAD) and genetic information (through ADGC). The network also provides an infrastructure to facilitate NIA signature programs like Alzheimer's Disease Neuroimaging Initiative(ADNI) and the Alzheimer's Clinical Trials Consortium (ACTC).

Our Shiley-Marcos ADRC aims to follow 500 participants with and without cognitive impairment annually to systematically and thoroughly characterize them over the course of their participation and corroborate that clinical characterization with an analysis of their brain tissue at the end of life. Participants in the Shiley-Marcos Alzheimer's Disease Research Center Cognitive Aging Observational Longitudinal Study comprise the 'clinical core cohort' of the center and the data and samples collected through that protocol are de-identified and then shared with these national resources. They are also used locally by scientific collaborators from multidisciplinary areas of scientific investigation at UCSD, Salk, Scripps, Sanford Burnham, and other partners at academic and industry institutions.

Scientific advancement in the field of Alzheimer's disease and related dementias is moving at an increasingly rapid pace now that the biomarkers used to measure Alzheimer's specific pathology in the living brain can be measured effectively. These biomarkers enable researchers to detect the disease more than a decade before the onset of symptoms, diagnose different forms of dementia with greater accuracy, and measure the effectiveness of disease-modifying treatments. Biomarker advances continue to discover the methods that will produce the most accurate information with the least invasive and least costly tools and techniques possible.

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Meet Genell Greenberg continued

putting themselves in the shoes of those with dementia and imagining what it must be like to be them. This perspective helps to promote greater understanding and compassion for those affected by dementia. She explains, "Caregiving can often be really challenging. When you run out of patience, try to think about what it must be like to be your loved one, and how they feel knowing that they are losing their ability to deal with the world, and how frightened they must feel." With Ms. Greenberg's guidance and the support of the Lewy Body Support Group, individuals and families affected by Lewy Body Dementia can find a safe space and comfort as they navigate the challenges of this condition. Topics of discussion in the group may include everything from managing activities of daily living to end-of-life decisions and working with palliative care and hospice.

Ms. Greenberg shared her perspective on the importance of education and experiencing the world outside the classroom. She emphasized the value of formal education and stressed the significance of community service and traveling to gain a broader understanding of the world. She would like to see community service integrated into school curriculums and a year of service encouraged between high school and college. This would allow students to work in different environments and learn from experiences outside their families. Ms. Greenberg's view on education highlights the importance of both traditional learning and experiential education to encourage well-rounded individuals. As she put it, "Formal education is important, but there is a wealth of education to be gained by traveling and experiencing things outside the classroom." This belief supports the value of gaining real-world experience and learning from diverse perspectives, which contribute to personal growth and development.

This view on community service is seen throughout Ms. Greenberg's life. She began her professional career as a Social Worker. After graduate school, she took a position managing a residential facility for delinquent boys. Her responsibilities encompassed a wide range of tasks including acquiring funding, hiring and firing personnel, and coordinating the program with the professional and ancillary staff. She recalls, "It was challenging but I learned a lot about managing a team and hopefully helping to divert the boys from becoming entrenched in the criminal justice system." Thereafter, she transitioned into a health planning role with the federal government. She served as an intermediary between local communities and the Federal Government, facilitating decisions regarding the allocation of medical funds and resources. This job involved plenty of politics and power struggles between medical professionals and Federal decision-makers. Ms. Greenberg next became Director of the Rape Crisis Center in Santa Fe, New Mexico. The center was largely volunteer-run. She trained volunteers to assist the victims including counseling and support from first contact with the Center through, in some cases, collection of evidence and prosecution of the perpetrator. She also managed the overall operations of the center, which involved grant writing, advocacy, and much community contact in terms of public education This experience influenced Ms. Greenberg's decision to pursue a legal career. She noted that the lessons she learned and the skills she acquired as a social worker all contributed to her work as an attorney and the work she's currently doing with dementia patients and their families.

As an attorney, Ms. Greenberg specialized in Family Law, specifically in divorce mediation. This was an ideal way to combine both her social work and family law skills. As a mediator, she helped couples resolve all aspects of their divorce, including child-sharing issues and the division of assets and debts. She saw people at their best and worst, and it was rewarding to help them through what is usually a very difficult time.

Ms. Greenberg has several hobbies.One of her main interests is yoga, which she has practiced for over 30 years. She says "It's tremendously beneficial for the body, mind, and spirit." After retiring from practicing law, she became a Registered Yoga Teacher (RYT-500) and has been teaching yoga for the past 7 years. Other interests include cooking and dancing. She feels fortunate to have traveled internationally over her life and looks forward to more travel in the future. The next big trip will be to Japan, to visit her daughter. Ms. Greenberg is grateful to be able to spend time with her friends and loved ones, especially after the isolation caused by the pandemic.

In conclusion, Ms. Greenberg emphasizes the importance of compassion and gratitude. She is making an impact on many individuals and families affected by Lewy Body Dementia. We appreciate her commitment and the lifetime of professional experience she contributes through her leadership with the Lewy Body Support Group. The remarkable work of unsung heroes like Ms. Greenberg is inspiring and reminds me of the positive impact I can make in my community.

Vidushi Sharma volunteered at the SMADRC as a high school student to gain experience in the research arena and learn more about Alzheimer's disease and related dementias.

Research Procedures and Return of Results continued

The more deeply we are able to characterize a participant, the more valuable their data becomes. Participants in the Cognitive Aging Observational Longitudinal Study are now being given the opportunity to enhance their 'biomarker characterization' through participation in PET imaging using amyloid and tau tracers to assess these protein levels in the living brain. In fact, the NIA has a mandate for our center to obtain triple imaging on as many of the participants in our clinical core who will agree. Participants who do agree to these procedures will be compensated for each procedure they agree to and will now begin to receive feedback about the findings obtained through these scans. The neuroimaging data is being analyzed in a central repository in a standardized manner to supply results that can be shared back with the participants. These results can have implications for individuals who choose to receive them.

The following questions and answers have been compiled to provide more information about the procedures that participants in the Cognitive Aging Observational Longitudinal Study will be invited to consider.

WHAT RESEARCH PROCEDURES ARE AVAILABLE TO ADRC PARTICIPANTS? WILL THE RESULTS BE SHARED WITH ME?

Memory and thinking tests – Participants receive an annual evaluation of memory and other cognitive abilities. A brief summary of these test results is provided following each assessment.

Magnetic resonance imaging (MRI) is used to image the structure of the brain. MRI can show vascular changes and neurodegeneration, but it does not identify a specific diagnosis. Participants will receive feedback if any life-threatening brain changes are observed and may receive a copy of the raw research scan data to share with their physician.

Positron emission tomography (PET) imaging is used to detect accumulation of Alzheimer's disease proteins in the brain. Amyloid PET and tau PET imaging are available to ADRC participants. Participants can receive feedback about whether these proteins are abnormally elevated compared to others their age.

Lumbar puncture – A small sample of cerebrospinal fluid (CSF) collected from the lower back using a fine needle is checked for biomarkers of AD and related dementias. Participants can receive feedback about whether CSF amyloid levels are abnormal and, in some cases, whether alpha synuclein protein levels are abnormal. CSF alpha synuclein can help differentiate AD from Lewy body dementia for more accurate diagnosis and treatment.

Blood draw – Efforts are underway to develop tests that can detect AD biomarkers in the blood. At this time, our blood-based biomarkers are experimental, and the results are too uncertain to return to participants.

Brain donation at the end of life – provides a definitive diagnosis and makes it possible to confirm with certainty how well biomarker tests that were performed during life detected AD pathology.

Family members are provided with a written report of autopsy findings.

WHAT ARE BIOMARKERS?

A biomarker is something that can be measured that reflects a biological process. Biomarker testing is an important tool in the research and diagnosis of Alzheimer's disease (AD). Biomarkers of AD include

- *Beta-amyloid protein* – the hallmark protein of AD that forms brain deposits called amyloid plaques.
- *Tau protein* – a protein in the brain that can form tangled bundles called neurofibrillary tangles.
- *Loss of brain cells (neurodegeneration)* – Neurons are cells that transmit messages from one area of the brain to another. AD causes loss of neurons and their connections (synapses).

WILL I RECEIVE MY BIOMARKER RESULTS?

Results of some biomarker procedures can be made available to you if you choose to receive feedback. Others are still under development and for research only.

Participants and their families should carefully consider whether they would like to receive their biomarker results. It is important to weigh both the benefits and challenges of learning this information, especially if you have no symptoms of memory loss.

POSSIBLE BENEFITS:

- → Helps you plan for the future.
- → Allows you to make lifestyle changes that may delay symptom onset or progression.
- → Biomarker confirmation of AD pathology might facilitate earlier access to treatment.
- → Research results do not automatically become part of your medical record, but you may choose to share them with your doctor.

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ADRC RESEARCH PROCEDURE	INFORMATION DISCLOSED	METHOD OF DISCLOSURE
Neuropsychological Testing	No Impairment or Impairment (and level) in each Cognitive Domain	Letter from Neuropsychologist (Annual Letter)
Amyloid PET Imaging	Amyloid Positive or Negative	In-Person Meeting or Phone/Zoom with Neurologist
Tau PET Imaging	Tau Positive or Negative	In-Person Meeting or Phone/Zoom with Neurologist
CSF Amyloid from Lumbar Puncture	Amyloid Positive or Negative	In-Person Meeting or Phone/Zoom with Neurologist
MRI Scan	Incidentally Detected Abnormal Finding Copy of Scan (to all)	Phone/Zoom with Neurologist if there is an Incidentally Detected Abnormal Finding
Clinical Evaluation	New Diagnosis or Change in Diagnosis	Phone/Zoom with Neurologist
Autopsy	Pathological Diagnosis	Letter from Pathologist
Plasma Amyloid from Blood Draw	Not Disclosed at This Time	Not Disclosed at This Time
APOE Genotype	Not Disclosed at This Time	Not Disclosed at This Time

Research Procedures and Return of Results

continued

POSSIBLE CHALLENGES:

→ Knowledge of one's biomarker status may result in psychological distress for some people.

→ Not everyone biomarker positive will qualify for treatment.

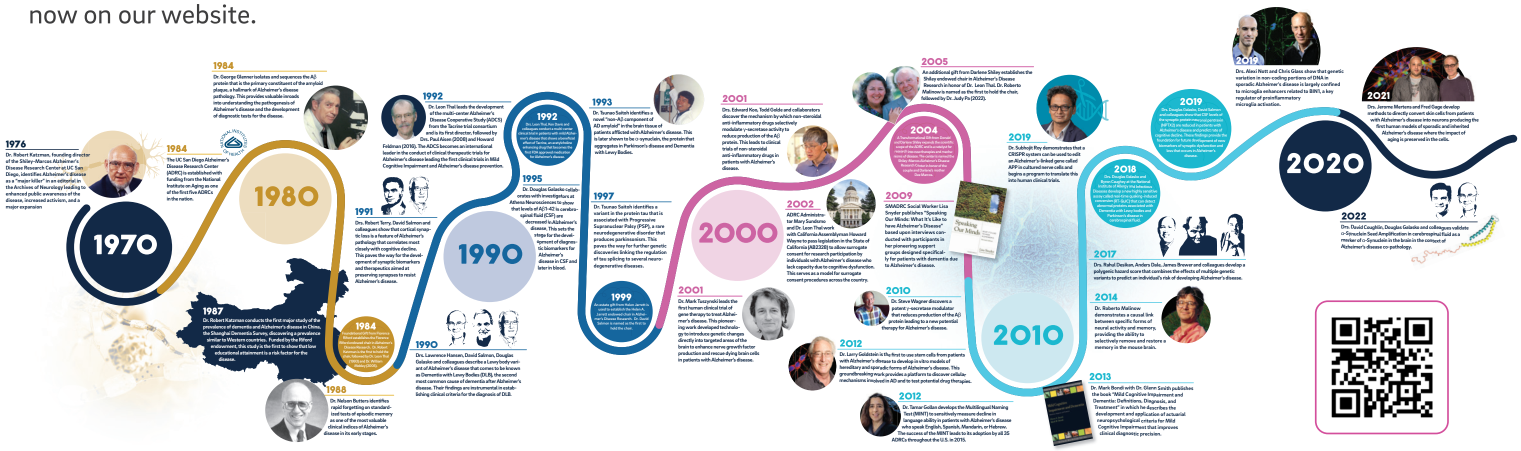
→ Treatment may have limited impact on slowing symptom progression.

HOW WILL I GET MY BIOMARKER RESULTS?

An ADRC clinician will meet with you to discuss your results and answer any questions. If you would like additional support following the feedback appointment, we will schedule a follow-up appointment with our licensed clinical social worker. Depending on the procedure, it may take up to a year to obtain biomarker results.

Celebrating 40 Years of Discovery and Impact

Last year marked the 40th anniversary of the Shiley-Marcos Alzheimer's Disease Research Center at UC San Diego. Since our founding in 1984 as one of the first five Alzheimer's Disease Research Centers in the nation, we have been at the forefront of groundbreaking research, from identifying key biomarkers to pioneering new clinical trials and therapies. We are proud of the legacy we've built together—with the unwavering support of our participants, families, and community. To commemorate this milestone, we invite you to scan the QR code to view a special presentation highlighting our transformational accomplishments over the decades, available now on our website.



SEX DIFFERENCES IN ALZHEIMER'S DISEASE; THE WOMEN INFLAMMATION & TAU RESEARCH STUDY

I am Dr. Erin Sundermann, Associate Professor and cognitive neuroscientist in the Department of Psychiatry at UC San Diego. I am Dr. Sarah Banks, Associate Professor in Neurosciences and Director of the Neuropsychology Program at the Center for Memory Disorders and Brain Health at UC San Diego.

Our research aims to better understand why women bear the greater burden of Alzheimer's disease even after adjustment for women's longer lifespan compared to men. To do so, our research involves working with neuropsychological, genetic, biomarker and neuroimaging data to investigate sex differences in all aspects of Alzheimer's disease (e.g., overall risk, risk factors, clinical trajectory, and biological mechanisms) and female-specific AD risk/protective factors such as menopause characteristics and use of hormone-based mediations (e.g., oral contraceptives, menopause hormone therapy).

WHAT INITIALLY LED YOU BOTH TO EXPLORE SEX DIFFERENCES IN AD?

The fact that women represent two-thirds of AD cases has always struck us both as significant and concerning. Yet, this remarkable sex difference has been largely overlooked in research, particularly in basic science studies where Alzheimer's disease mouse models were typically male. We see sex/gender disparities as a clue that sex/gender-related factors are at play in Alzheimer's disease, so we need to research these factors and the mechanisms they influence to figure out what makes males more protected from Alzheimer's disease.

WHAT ARE SOME MAJOR GENDER DIFFERENCES IN THE PROGRESSION OR PRESENTATION OF AD?

The most well-known difference is the higher prevalence of AD in women versus men, but there are many other disease aspects that differ between men and women. For example, the clinical trajectory differs, whereby women, on average, tend to be better able to maintain normal cognitive function in the early stages of Alzheimer's brain changes but then decline more rapidly once those brain changes have advanced. There are sex differences in terms of the burden of certain types of Alzheimer's brain changes, whereby women tend to show a greater burden of the neurofibrillary tangles. There are also sex differences in treatment response to current FDA-approved, AD drugs. For example, Lecanemab tends to show more beneficial effects in men. Lastly, there are likely different biological mechanisms underling AD risk between women and men. For instance, we suspect that inflammation may have a more prominent role in AD in women versus men, and we are investigating this in our ongoing study, the Women: Inflammation and Tau Study (WITS) and the Black Women: Inflammation and Tau Study (BWITS).

WHAT ROLE DO HORMONES PLAY IN AD DEVELOPMENT?

Sex hormones, like estrogen and testosterone, play a key role in brain health and may influence the risk of developing Alzheimer's disease. Estrogen, in particular, helps protect brain cells by supporting memory, reducing inflammation, and promoting the removal of harmful proteins linked to Alzheimer's. However, as women go through menopause and estrogen levels decline, this protection may weaken, potentially increasing their risk for the disease. Part of our research focuses on how changes in sex hormones over the lifespan, due to pregnancy, menopause, hormonal-based medications, etc. impact brain aging and risk for Alzheimer's disease.

HOW DO LIFESTYLE FACTORS—SUCH AS DIET, EXERCISE, AND SLEEP—DIFFERENTIALLY IMPACT ALZHEIMER'S DISEASE RISK IN MEN AND WOMEN?

Lifestyle factors like diet, exercise, and sleep can impact Alzheimer's disease risk differently in men and women due to biological and hormonal differences. For example, regular physical activity has been shown to have a stronger protective effect on cognitive function in women. Sleep disturbances have also been associated with greater risk of AD and certain sleep disturbances such as insomnia are more prevalent in women. The link between sleep apnea and AD is increasingly being recognized and some evidence suggests that sleep apnea is underdiagnosed in women although equally prevalent in postmenopausal women and men. It is essential to understand how lifestyle factors differentially impact AD risk in women and men to develop more effective, tailored prevention strategies that are optimal for women versus men.

MEET THE NEW MEMBERS OF OUR TEAM!

CAMILA LINO was born in Chula Vista, California, and raised in Tijuana, Mexico, until age 10. She earned her degrees in Cognitive and Behavioral Neuroscience and Psychology from UC San Diego in 2018. Since graduation, Camila has worked with UCSD, focusing on multi-disciplinary, longitudinal research. Before joining SMADRC, she conducted clinical interviews, collected brain MRI scans, and administered neuropsychological assessments for adolescents under the guidance of Dr. Susan Tapert. Additionally, she served as the primary contact for Spanish-speaking families and played a key role in retaining hard-to-reach participants. Her extensive experience with multicultural participants equips her to work effectively within diverse communities.

MARIANA PEREZ, B.S. received her Bachelor's degree in Kinesiology from San Diego State University. Before joining the Shiley-Marcos Alzheimer's Disease Research Center (SMADRC), she worked at UC San Diego's Exercise and Physical Activity Resource Center (EPARC) on studies focused on aging, fall prevention, and women's health. In her current role as the Community Research Liaison and Promotora Program Coordinator, she supports recruitment and outreach for studies on Alzheimer's disease and related dementias, including the Alzheimer's Disease Neuroimaging Initiative (ADNI) and the longitudinal study. Mariana is especially motivated by the opportunity to help make research more approachable and accessible to a broader range of participants.

KASSANDRA PORTILLO began her career in clinical research in 2019 as a Laboratory Manager and Lead Phlebotomist at the San Diego State University (SDSU) Department of Psychology, at a center dedicated to promoting and studying the overall health of the Hispanic and Latino community. During her time at SDSU, she collaborated with the University of California, San Diego (UC San Diego) in the Department of Psychiatry. Kassandra was also involved with several research studies, gaining knowledge and experience with diverse research protocols and interdisciplinary teams. During her tenure Kassandra took on the role as clinical research coordinator where her passion grew for neuropsychology and neurodegenerative disease research. In 2024, Kassandra joined the UC San Diego Department of Psychiatry full-time as a Staff Research Associate and Phlebotomist in a lab focused on digital biomarkers. As of 2025, she has been working in conjunction with the Departments of Psychiatry and Neuroscience, managing, and supporting various projects centered on cognitive decline associated with neurodegenerative diseases, including Alzheimer's disease.

ISABEL CHARISSE DURAN is a bilingual San Diego native with over 27 years of experience in the medical field. Charisse began her career in 2000 when she earned her California Pharmacy Technician license from Pima Medical Institute. She spent two decades at Costco as a Pharmacy Technician, where she eventually retired. She then continued her career path as a Medication Reconciliation Specialist in the Emergency Room in the Clinical Informatics Department and Behavior Health Department. Now retired from pharmacy, Charisse is focusing on her passion for Neuroscience research. She currently serves as the Front Office Manager at the SMADRC.

ANAÏS BARTHELET received her B.A. in Communications from San Diego State University and currently serves as the Adult Down Syndrome Program Coordinator at the Shiley-Marcos Alzheimer's Disease Research Center (ADRC). In this role, she supports families through the Down Syndrome Clinic and helps connect individuals with research opportunities focused on aging and Alzheimer's disease. Anaís is especially passionate about bridging the Down syndrome and Alzheimer's communities, a commitment rooted in her personal experience—her older brother, Charlie, is living with Down syndrome, and two of her grandparents have been diagnosed with Alzheimer's disease.

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DISEASE RESEARCH CENTER

HELP US ADVOCATE FOR CRITICAL ADRD FUNDING

The Shiley-Marcos Alzheimer's Disease Research Center (ADRC) is one of California's 10 Alzheimer's Disease Centers (CADCs), established over 40 years ago to expand access to diagnosis, treatment, and specialized training for primary care providers. These centers are vital community resources—especially for caregivers, families, and medical students in communities of color, who face disproportionate challenges accessing expert care. Funding supports Quality of Life Programs, including support groups and social work services.

This past July, the future of CADCs was at risk with lawmakers considering major funding cuts to these programs that provide many people living with Alzheimer's and dementia—and their families—critical support. Thanks to advocacy efforts, the funding was preserved.

DOWN SYNDROME & ALZHEIMER’S DISEASE

Advancing Research Through Inclusion & Partnership

By Anaís Barthelet

People with Down syndrome (DS) are at a significantly increased risk of developing Alzheimer’s disease (AD), with many showing signs of changes in the brain associated with AD by age 40. This heightened risk is due to the presence of an extra copy of chromosome 21, which carries the gene that produces amyloid precursor protein (APP). An overproduction of APP leads to the buildup of beta-amyloid plaques—one of the hallmarks of Alzheimer’s disease. As a result, individuals with DS are more likely to experience earlier and more frequent onset of Alzheimer’s symptoms compared to the general population.

While the connection between DS and AD has long been recognized, research into this intersection has historically been underrepresented. To address this gap, the Shiley-Marcos Alzheimer’s Disease Research Center (ADRC) at UC San Diego has taken proactive steps to expand its focus and include more individuals with Down syndrome in its research cohort. The ADRC is currently in the process of building out its DS program, with a goal of enrolling more participants and bringing on board scientists and clinicians who specialize in this unique area of study.

Participating in research is a critical step toward deepening our understanding of Alzheimer’s disease in individuals with Down syndrome. By studying how and when changes occur in the brain, researchers can develop earlier detection methods, identify potential therapeutic targets, and ultimately work toward preventing or slowing the disease. Each individual who participates in research contributes to a clearer picture of how Alzheimer’s progresses in people with DS—and how best to intervene.

A vital part of this initiative is the growing partnership between the ADRC and the UC San Diego Down Syndrome Clinic. This collaboration enables a seamless connection between clinical care and research. A dedicated ADRC research coordinator is now embedded in the DS clinic, attending each session to provide information about the research program and assist with the enrollment process. This clinic-based approach allows families to learn about research opportunities in a trusted and familiar setting, making it easier to take the first step toward participation.

For families and caregivers seeking more information, the National Institute on Aging (NIA) offers a helpful handout that summarizes the relationship between Down syndrome and Alzheimer’s disease and outlines ways to get involved in research. You can access the PDF here: Alzheimer’s Disease in People with Down Syndrome – NIA.

If you or someone you know is an adult with Down syndrome aged 35 or older, consider joining our longitudinal study. Your involvement can help shape the future of Alzheimer’s research and bring hope to individuals and families impacted by DS and AD. To learn more about how to participate, please contact the ADRC at participate@health.ucsd.edu or join our research registry. Together, we can make a difference.

YOU CAN GET INVOLVED IN ALZHEIMER’S ADVOCACY:

1. **Submit a Letter to the Editor:** Send a letter to the San Diego Union-Tribune using our template. Add your personal experience with the Shiley-Marcos ADRC, highlighting how diagnosis, care, or support services made a difference.
2. **Join the Alzheimer’s Association Advocacy Campaign:** Urge California lawmakers to increase funding for these centers.
3. **Share Your Story via Zoom:** Meet with a Shiley-Marcos ADRC team member to record a testimonial about how our programs and research have impacted you or a loved one.

Scan the QR code for more information about how you can get involved!

COMMUNITY ENGAGEMENT EVENTS + AWARDS

By Mariana Perez

Over the past few months, the team at the UC San Diego Shiley-Marcos Alzheimer's Disease Research Center has been out in the community partnering with local organizations, hosting events, and deepening our relationships with those we serve. We're excited to share a few highlights from this meaningful work!

One of our collaborations took place at Our Lady of Guadalupe Church in Chula Vista, where we partnered with Alzheimer's San Diego to host a Spanish-language memory screening event in May. This event offered a space for older adults to ask questions about memory changes, receive free cognitive screenings, and learn about opportunities to participate in research. This effort included a community presentation just three days prior on "Recognizing the Signs of Dementia", which helped attendees feel informed about Alzheimer's Disease and related dementias, as well as learn about the importance of participating in research.

Also in May, we were thrilled to celebrate Older Americans Month at the George G. Stevens Senior Center, thanks to a collaboration with the Alzheimer's Disease Neuroimaging Initiative (ADNI) and the Black Women Inflammation and Tau Study (BWITS). The day featured musical performances, storytelling, a community lunch, and a chance to engage with community vendors. One of the highlights was a Community Panel Discussion, where community speakers including Dr. Gabriel Leger (UC San Diego), Martha Ranon (SCRC), Elizabeth Bustos (County of San Diego), Pastor Nate Stewart (Greater Life Church), Asoniti Foster (BWITS Community Advisory Board), and Jay Larossa (Philippine Nurses Association of San Diego), answered audience questions on topics ranging from brain health and caregiving to community resources and lifestyle strategies for healthy aging. The day concluded with awards, opportunity drawings, and tributes to community elders and contributors.

We also had the chance to join Live Well San Diego at their Healthy Aging Health Fair, where we offered free memory screenings and connected with the community about the importance of early detection and staying proactive about brain health.

Most importantly, we also took time to say thank you to the individuals who make our research possible! This spring, we hosted our Participant Appreciation Event in English, where current study participants were treated to refreshments and guest speakers. We're already preparing a Spanish-language appreciation event for Fall 2025 to continue building a more inclusive space for all of our study participants.

We're happy to share that Mariana Perez, Community Research Liaison for ADNI at our center, received the Bridge Builder Award at this year's ADNI Spring Steering Committee Meeting. This award recognized her efforts to form lasting, meaningful connections with communities that are often underrepresented in research.

And finally, a huge congratulations to our director, Dr. James Brewer, who was awarded with the Community Impact Award from the Southern Caregiver Resource Center. The award, presented at the "Waves of Giving Luncheon" in February, celebrates our center's long-standing collaboration with SCRC and our shared mission to support caregivers and families facing the challenges of memory loss.

Image, left to right: Teresa Marroquín, Gloria Salas, Britney Escobedo, Beverly Castillo, Mariana Perez, Jocelyn Vargas, Brandon Pulido, Zenaida (Cindy) Hambrick, Irma Hernandez, Camila Lino, Esperanza Aguilar, María Martínez, Eladia Tepetzi

FINDING THE SILVER LINING THROUGH CREATIVE EXPRESSION

Cynthia Knight Shares Her Story About Finding Her Voice and Paying It Forward

When Cynthia Knight's husband, Dean, was diagnosed with Lewy Body Dementia three years ago, their world changed overnight. Faced with overwhelming information and an uncertain future, Cynthia turned to poetry—an unexpected but powerful outlet. Drawing on materials from caregiver resources and her personal experience, she began crafting heartfelt poems during an adult education class.

What started as a personal coping strategy quickly grew into something more. Sharing her poetry in the UC San Diego Shiley-Marcos Alzheimer's Disease Research Center's Early Stage Support Group, Cynthia saw firsthand how her words resonated—sparking tears, laughter, and deep connection. Fellow caregivers began asking for copies, and she now shares her handmade booklets widely: with doctors, nurses, friends, the SMADRC E-newsletter, and support groups.

Cynthia's writing offers more than just comfort; it educates. With a background in education, she uses poetic forms like acrostics and Fibonacci sequences to express both her and Dean's perspectives. Through it all, poetry has helped her slow down, stay patient, and find meaning amid the challenges of caregiving.

Cynthia's journey is a reminder that even in the darkest times, creativity can be a light. Her work transforms hardship into healing—offering a true silver lining. The Shiley-Macos ADRC monthly e-newsletter features one of Cynthia's poems each issue. Sign up to receive this digital publication in your inbox each month!

CAREGIVER TO LOVED ONE

by Cynthia Knight

A new way to get along.
The tune has changed to our exchange,

We now dance to a different song.

We each now live In different realities,
Where simple chores seem massive.
You are scared it seems all of the time,

Shifting between hostile and passive.

As your memory loss cannot be controlled,
I require an abundance of endurance.
As you recede, I must proceed,

With patience and reassurance.

So during times when you're frustrated,
The times when you display fury,
I promise that I will comfort you,

So you don't have to worry.

There may be times of outbursts,
When a temper you might throw,
I will do my best to be forgiving,

My frustration I will try not to show.

Should your mind fail to remain on task,
And you continually forget a routine,
I will calmly repeat the instructions,

I won't turn it into a scene.

Already there are times you struggle,
To find the right words to speak,
So we use our body language,

To relay the message you seek.

But if you should ever direct anger at me,
And try to push me away,
I will gently distract your attention,

For at your side I will always stay.

Eventually it may come to the point,
That it is I who you don't seem to know,
I won't take the matter personally,

I will be patient and go with the flow.

When chaos ensues and you get confused,
And you can't seem to understand,
I will look in your eyes and smile,

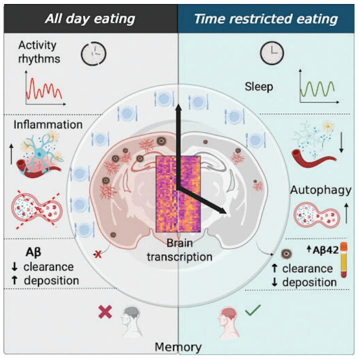
And I will gently hold your hand.

Going forward we have a new language,
A new way to get along.
The tune has changed to our exchange,
We now dance to a different song.

TIME YOUR MEALS AND FIGHT ALZHEIMER'S SYMPTOMS

UNLOCK THE POWER OF FASTING TO FIGHT ALZHEIMER'S DISEASE

What if the key to better brain health isn't just what you eat but when you eat? Dr. Paula Desplats' lab and the Alzheimer's Disease Research Center at UC San Diego are exploring this question in their TREAD study, which investigates how mealtimes affect Alzheimer's disease symptoms.



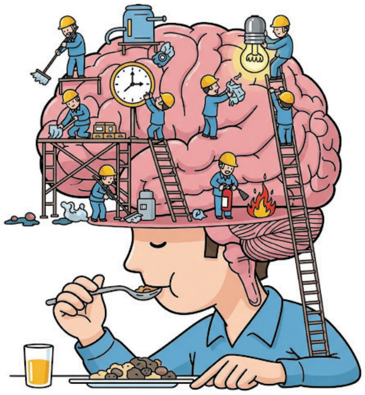
WHY DOES TIMING MATTER?

Circadian rhythm has been known to be a key regulator for multiple systems in the human body by coordinating physiology with the environment. Over 40% of the genes in our organs work on a 24-hour cycle. A specialized group of cells in the brain, known as the circadian clock, acts like a timekeeper, using light signals to keep our body's timing in sync, for example, regulating the sleep-wake cycle. Disruptions in this rhythm are strongly linked to Alzheimer's Disease (AD), with most patients presenting disturbed sleep patterns and behavioral circadian alterations, otherwise known as "sundowning", making them sleepy during the day and restless at night. Not only does AD impact the health and cognition of an individual, it also has implications for the people around them, especially caregivers, whose sleep cycles are heavily affected due to their responsibility of caring for their loved ones at night hours.

HOW CAN FASTING HELP?

Notably, our eating habits also help manage our body's rhythms. Emerging research shows that daily feed/fast cycles can strongly regulate circadian rhythm.

One of the simplest and most accessible interventions is time-restricted eating (TRE), which is characterized by a time window for eating that ranges anywhere from 6 to 12 hours a day. In their most recent study, the Desplats Lab discovered that modifying feeding times in mouse models of AD led to substantial benefits, including reduced brain pathology, improved sleep, and enhanced memory.



Now, the TREAD study is looking to translate these exciting findings to patients by investigating

The effects of 14 hours of nightly fasting were tested to determine the effectiveness of this mealtime intervention on memory impairment and AD-associated neuropathology.

WHAT'S THE IMPACT?

By utilizing the prolonged nightly fasting form of TRE and aligning eating with the body's natural wake phase, TRE helps optimize nutrient processing, enhance sleep quality, and sharpen cognitive functions. Experts believe that the timing of our meals is crucial for our body's clock. Intermittent fasting not only reduces inflammation but also helps clear out waste in our cells and provides a better energy source for the brain. Most importantly, it could provide a powerful intervention for those at risk of AD, both in terms of the symptoms they experience and how effectively they receive clinical care.

HELP US ADVANCE ALZHEIMER'S RESEARCH!

Join us in this vital research and contribute to meaningful steps towards Alzheimer's prevention! Your participation could unlock new ways to manage memory decline and improve quality of life for millions.

If you are interested in learning more about the study or have any questions, you can contact the TREAD team via email (TREAD@health.ucsd.edu) or leave a message via phone at (858) 822-3182.

Running for a Cure: Norb Lyles' Inspiring Mission to Honor His Mother and Support Alzheimer's Research

For Norb Lyles, running is more than a personal passion—it's a way to honor his late mother, who passed away from Alzheimer's disease, and to contribute to finding a cure for the devastating illness. Norb made the life-changing decision to turn his dedication to running into a mission of hope and awareness. He committed to donating $100 for every race he completes, with the goal of running 100 races by the time he turns 100. He just completed his 76th race in Catalina, AZ.

Norb initially donated to other Alzheimer's associations but later learned that much of the money was spent on administrative costs. Wanting his contributions to have a more immediate impact, Norb found the UCSD Shiley-Marcos Alzheimer's Disease Research Center.

He was drawn to SMADRC's direct involvement in cutting-edge Alzheimer's research and their dedication to advancing treatments and potential cures. Since then, he has proudly donated the proceeds from his races to the center, knowing that his support goes straight to the scientists working tirelessly to combat the disease.

"There already have been great strides at figuring out what might curb the disease if caught early, so hopefully with more years of research, there might be a cure one of these days.," Norb has shared. "Running these races with [my mother] in my mind, talking to her, and her helping me along the way can be really emotional. It's a wonderful feeling."

Norb's mission is an extraordinary example of how one person's dedication can make a difference. With each race, he not only honors his mother's memory but also helps pave the way for breakthroughs in Alzheimer's research. His journey is a testament to the power of turning personal loss into meaningful action for the greater good. You can follow his journey on his blog. Add QR code: https://ultranorb-100by100.blogspot.com/

IN MEMORY OF DR. EDWARD KOO

It is with great sadness that we announce the passing of our dear colleague and friend, Dr. Edward Koo. Dr. Koo touched countless lives through his groundbreaking research, kindness, humor, and inspiring courage during his battle with cancer. He passed peacefully surrounded by family after entering hospice care.

Dr. Koo's remarkable career spanned prestigious institutions, including Duke, UCSF, Johns Hopkins, Harvard, and UC San Diego, where he joined as Associate Professor in 1996. A leader in Alzheimer's research, Dr. Koo made critical advances in understanding Amyloid Precursor Protein processing, Amyloid beta production, and neurodegenerative pathways. His mentorship shaped many future scientists, and his dedication to the field was unparalleled.

To honor Dr. Koo's legacy, our department and the Alzheimer's Disease Research Center have established the Edward Koo Endowed Dissertation Award. This award will recognize outstanding PhD graduates in Neurosciences, ensuring his name continues to inspire excellence. Contributions to the memorial fund are welcomed and appreciated.

Dr. Koo's impact on science and all who knew him remains a lasting blessing.

For those who wish to contribute Please make your check payable to UC San Diego Foundation and note in the memo Edward Koo Dissertation Award in Neurosciences.

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CURRENTS

The Shiley-Marcos Alzheimer's Disease Research Center provides an array of in-person and virtual support groups and activities designed to support well-being and quality of life for persons with memory disorders and their care partners.

Facilitated by trained professionals • No obligation to participate in research • No cost to participate
Virtual meetings are easy to access via zoom or phone • Pre-Registration is required: (858) 822-4800 or adrc.ucsd.edu

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PARTICIPATION MADE EASY

We provide compensation!

Participants receive compensation for annual in-person visits with additional compensation for optional procedures.

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Specialized procedures may require a trip to La Jolla. We can provide transportation.

Subject matching

Many procedures are optional, and we will match you with studies that reflect your preferences. Many studies are observational.

Bilingual/ bicultural team

Hello
Hola

Study visits in Spanish or English. Social work facilitated support groups and quality of life activities offered at no cost.

Participate Remotely

Some components can be completed remotely, minimizing in-person visit requirements.

More information: **adrc.ucsd.edu**
Phone: **(858) 822-4800**
E-mail: **participate@ucsd.edu**

Seniors (65+) with or without memory concerns and those with a diagnosis, can join our research registry to be contacted about available opportunities.