PHILANTHROPIC IMPACT ON OUR ALZHEIMER'S RESEARCH COMMUNITY

DONOR PROFILES

We gratefully acknowledge all of our donors to the Shiley-Marcos ADRC, whose generous contributions empower our mission and fuel advancements in research, clinical care and community outreach.

Jay and Sarah Flatley

This year, we are deeply grateful to our generous annual donors, **Sarah and Jay Flatley**, for their unwavering confidence in our efforts. Their unrestricted support of the Shiley-Marcos ADRC demonstrates a profound trust in our director's ability to allocate resources to meet the most pressing needs as they arise. The Flatleys recognize that unrestricted funds are vital in today's innovative climate, enabling us to pursue high-risk, high-reward research that can lead to groundbreaking discoveries. We value this partnership and the impact it has on advancing our mission.

The **Martha Proctor Mack Foundation** provided funding for an additional centrifuge for our lab, significantly expanding our research capacity by enabling us to process and store biospecimens essential for biomarker discovery in Alzheimer's disease and related dementias. This equipment allows for rapid separation of blood and other fluids, preserving sample integrity and ensuring compatibility with downstream analyses. As biomarkers become increasingly central to early detection, diagnosis, and tracking of disease progression, in-house centrifugation capability supports collaborative projects and accelerates our ability to generate high-quality data for grant proposals and research in basic and clinical neuroscience.

Bill Stern, Patti (Stern) Ross and Russell Stern III

At the Shiley-Marcos ADRC, transformative philanthropy allows us to explore high-risk, high-reward science that goes beyond what traditional funding typically supports. The **Stern family**'s generosity has enabled the Shiley-Marcos ADRC to support two Development Awards each year to launch the careers of promising early-career scientists pursuing novel, high-impact research. Their generosity continues to shape the future of Alzheimer's science and reflects the power of engaged partners in driving meaningful, lasting change.

We are deeply grateful.

THANK YOU

From brilliant scientists and compassionate clinical care teams to generous philanthropists, tireless volunteers, dedicated case workers and supportive family members — each one of you plays a crucial role in this mission. **Your contributions are the heartbeat of our vision for a world without Alzheimer's disease and other dementias. Let's continue to work hand in hand, fueled by our shared passion and commitment, as we strive for a brighter future.**

Scan the QR code to make a gift.

Or to make a gift by check, make your check payable to the **UC San Diego Foundation** with a note that specifies the gift is for the Shiley-Marcos ADRC and the particular fund below that you wish to support.
Mail to:

UC San Diego Gift Services
9500 Gilman Drive # 0940
La Jolla, CA 92093-0940

FUNDS

- Shiley-Marcos Alzheimer's Disease Research Center Fund (#E2140)
- Quality of Life Program Support Fund (#RN120)
- Adult Down Syndrome and Alzheimer's Disease Fund (#E7885)
- Dr. Edward Koo Endowed Dissertation Award Fund (#E7852)

PLANNED GIFTS

We offer several planned gift options that allow you the flexibility to add to a current gift or establish a new named fund. For information on supporting the Shiley-Marcos ADRC through estate giving — including donating real estate, transferring appreciation securities or discussing a contribution in a living trust — please visit **giftplanning.ucsd.edu**.

To learn more about giving to the Shiley-Marcos ADRC, please contact Betsy Collins at e3collins@ucsd.edu or 858-349-0034.

UC San Diego respects your privacy. You may opt out of receiving fundraising information for UC San Diego Health by visiting advancementoptout.ucsd.edu or calling us toll-free at 800-588-2734. Your treatment or payment will not be affected by your choice to opt out of a fundraising communication.

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SHILEY-MARCOS ALZHEIMER'S DISEASE RESEARCH CENTER

THE IMPACT OF YOUR GIVING | 2025

A MESSAGE FROM THE DIRECTOR

UC San Diego has been a world leader in the fight against Alzheimer's disease for more than 40 years. In the mid-1980s, UC San Diego partnered with the National Institute on Aging to envision and establish NIH-funded Alzheimer's Disease Research Centers, or ADRCs, throughout the country to tackle the growing public health challenges of dementia in the aging population. Thanks to sustained NIH support, we have been able to maintain the long-term stability essential for clinical trials, data collection,and foundational research in pursuit of these ambitions.

Our 40 years of continuous funding from the NIH is a testament to our recognized leadership in the field, but it is philanthropy that allows us to reach beyond the expected — to pursue high-risk, high-reward ideas that rarely qualify for initial federal funding. Your support helps launch innovative pilot studies, nurture early-career scientists, and drive the collaborative, cross-disciplinary efforts that define transformative science. Over its long and storied history, the Shiley-Marcos Alzheimer's Disease Research Center (Shiley-Marcos ADRC) has helped to change the practice of medicine and, accordingly, impact the lives of millions of patients and families.

Last year we celebrated the 40th anniversary of NIH funding and the 20th anniversary of the Shiley-Marcos naming of the center. Shiley-Marcos ADRC founders Dr. Robert Terry and Dr. Robert Katzman planted the seeds of a program then elevated by Dr. Leon Thal, who emphasized collaboration, innovation and therapeutic development, with a strong focus on care and support of patients and their families. This work laid the foundation for UC San Diego's lasting contributions to understanding the biology of Alzheimer's disease with an eye toward making the broadest possible impact on public health. The partnership with Donald and Darlene Shiley accelerated Dr. Thal's efforts, and their generous support is reflected in the naming of the center.

In a time of less certain national funding, our mission remains strong — grounded in science, united in purpose, and focused on improving the lives of those affected by Alzheimer's disease and related dementias. Whether you have been with us for years or are just joining our community, thank you. Your partnership fuels progress — and brings us closer to a future free of Alzheimer's disease and related dementias.

With heartfelt appreciation,

James Brewer, MD, PhD
Director, Shiley-Marcos Alzheimer's Disease Research Center
Chair, Department of Neurosciences

RESEARCH SPOTLIGHT ON ALZHEIMER'S DISEASE IN ADULTS WITH DOWN SYNDROME

Adults with Down syndrome have a significantly higher risk of developing Alzheimer's due to the triplication of the APP gene on chromosome 21. Despite this well-known risk, this population has been largely underrepresented in aging research. Dr. Hiruy Meharena is an emerging leader in this field and the recipient of Development Awards, supported by the Stern family. His project studies how having an extra chromosome 21 changes brain immune cells (microglia) in ways that may lead to Alzheimer's disease, with the goal of finding new treatment targets.

Hiruy Meharena, PhD

Studying this cohort offers a unique window into early-onset, genetically driven forms of the disease. To expand this research, the Shiley-Marcos ADRC will engage more people with Down syndrome from the clinic and from the broader community to participate in research. We will rely on philanthropic support for this effort.

"This work is deeply personal to me — my older brother, Charlie, has Down syndrome, and three of my grandparents had Alzheimer's. I've seen firsthand how both of these diagnoses affect individuals and families, and I'm committed to helping advance research that supports people like Charlie as they age. We want to support families with Down syndrome through this additional and often unexpected challenge — helping them navigate the risk of Alzheimer's with more resources, education and compassionate care."

Anais Barthelet with her brother Charlie

– ANAIS BARTHELET
DOWN SYNDROME PROGRAM COORDINATOR

PARTICIPANT PROFILE

FINDING THE SILVER LINING THROUGH CREATIVE EXPRESSION

CYNTHIA KNIGHT SHARES HER STORY

Dean and Cynthia Knight

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. 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, in the Shiley-Marcos ADRC email newsletter and support groups.

Cynthia's writing offers more than just comfort; it educates. Drawing on her 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.

CAREGIVER SELF-CARE *by Cynthia Knight*

CREDIT YOURSELF FOR YOUR EFFORTS.
ACKNOWLEDGE YOUR STRENGTHS.
REJUVENATE BY STEPPING BACK.
ENGAGE THE HELP OF OTHERS.
GET AWAY TO UNWIND.
INHALE DEEPLY.
VOICE YOUR FRUSTRATIONS.
ENJOY THE SMALL SUCCESSES.
REMEMBER TO LOVE YOURSELF.

IN MEMORIAM: DR. EDWARD H. KOO (1954 – 2025)

A Trailblazer in Alzheimer's Disease Research and Mentor to a Generation

The Alzheimer's research community is mourning the loss of Dr. Edward H. Koo, a pioneering neuroscientist, compassionate mentor and beloved colleague. His scientific legacy is vast, his mentorship profound and his impact on Alzheimer's research enduring. Dr. Koo spent much of his distinguished career at UC San Diego, where he served as professor of Neurosciences and co-director of the Shiley-Marcos ADRC. His work helped shape the fundamental understanding of Alzheimer's disease pathology, especially in relation to amyloid precursor protein (APP) processing and the formation of amyloid-beta plaques.

He was a tireless advocate for translational research, bridging the gap between laboratory insights and clinical application. A seminal contribution from Dr. Koo's lab was that the gamma-secretase enzyme, which produces amyloid beta from APP, could be modulated by drugs — a finding that led to the development of the first gamma-secretase modulator by Roche Pharmaceuticals. His research into APP trafficking, cleavage products and gene expression provided foundational knowledge still guiding therapeutic efforts today.

At the Shiley-Marcos ADRC, Dr. Koo championed early-career investigators and helped build a collaborative, compassionate research environment. Dr. Koo was an extraordinary mentor — rigorous, supportive and generous with his time. Colleagues and former trainees remember him as a brilliant scientist with rare humility and kindness.

Iris H. Garcia-Pak

The generosity of many donors has enabled us to establish a fund to honor Dr. Koo's memory, which will support an annual award for the best research dissertation by a neuroscience PhD trainee at UC San Diego. At a well-attended celebration of life for Dr. Koo in September, his wife Nancy and Dr. Brewer made the first presentation of this award to Iris H. Garcia-Pak, MD/PhD Candidate, for her dissertation "Goldilocks glutamate and the three Bs: how the blood-brain barrier helps regulate glutamate levels in the brain."

LOOKING FORWARD

Our journey continues as we embark on our next 40 years of discovery, as the concept of Alzheimer's disease itself changes. The new concept will better reflect the interplay between aging, metabolism, inflammation and how individuals are differentially susceptible to a mix of pathologies as they age. This will require a new language and framework unfamiliar to most patients and non-specialist physicians, and it will be our challenge to translate our discoveries across the nation and world.

It will be an extraordinarily exciting time. We are on the precipice of true transformative change. New molecular and genetic approaches will be applied to supercharge our understanding of the processes underlying cognitive stability or decline as the brain ages. Big data approaches and artificial intelligence will be critical as we connect the dots of an increasingly complex picture of aging and brain disease. We will continue to treasure the incredible resource that autopsy tissue provides and the wealth of data that result from in-depth assessment. **We still need your partnership as we continue to further understand and characterize brain aging.**

Together we can ensure that these discoveries arrive as soon as possible. We are grateful to our community of research participants, volunteers, donors and community partners, without whom this work could not take place. **Your gifts of time and treasure fuel our breakthroughs.**

A heartfelt thank you to Darlene Shiley, the Shiley Foundation and our esteemed UC San Diego Health Sciences leadership for their steadfast commitment to advancing Alzheimer's disease research.