MESSAGE FROM THE DIRECTOR

Thank you for your partnership in the transformative work taking place at the Shiley-Marcos Alzheimer’s Disease Research Center (SMADRC) at UC San Diego. We are excited to share with you this update on the groundbreaking programs now launched and thriving, despite the challenges of the pandemic. Our team’s perseverance and passion take us far, but we could not make such advances without your generous support. We cherish your dedication to us and our deep connections to you as we seek to rid the world of Alzheimer’s disease.

Here, we highlight team efforts to break new ground in Latino outreach and community engagement and in training the next generation of emerging scholars in the field. The two topics are related, as we seek to build resources toward making Alzheimer’s research more equitable and representative across our diverse communities. The scholars trained at our center recognize the heterogeneity of Alzheimer’s disease and the lack of diversity in research. The field has a lot of work to do in broadening applicability of our science to include the Latino community. The SMADRC is committed to leading the way toward progress in this critical endeavor. Thanks to your contributions, our diverse, young and brilliant emerging scholars will be well prepared to take the baton from us and ensure that this work continues across the nation.

I hope you enjoy learning from this annual report and that it leaves you feeling as I do — energized and optimistic about what we can accomplish together in the coming year!

Sincerely,

James Brewer, MD, PhD
Director, Shiley-Marcos Alzheimer’s Disease Research Center
Chair, Department of Neurosciences
By the year 2060, the number of Latinos living with Alzheimer's disease is expected to reach 3.5 million. Even though Latinos make up more than 18 percent of the U.S. population, they appear in less than 1 percent of clinical trials. The SMADRC is actively working to change this. For 35 years, we have been committed to Latino inclusion in research so that everyone in our diverse community benefits from scientific discovery and life-changing therapies.

In partnership with San Diego State University, SMADRC recently relocated one of its Spanish language research programs to the South Bay Latino Research Center in Chula Vista. The move addresses geographical barriers to our work and expands opportunities for the Latino community to access our testing kits. Support from donors is critical to this outreach.

The COVID-19 pandemic brought new challenges with stay-at-home orders and unreliable internet connections impacting remote testing. For this essential research to continue, we had to alleviate the technological barriers faced by many of our research participants. SMADRC recently purchased new technology for remote cognitive testing and neurology examinations with the goal of reaching as many people in the community as possible.

This initiative, supported by the generosity of donors, continues today. We have pledged to increase payments for research visits to help offset the costs of missed work for volunteers who participate in our research. In addition, our bilingual, bicultural staff members are busy translating written resources into Spanish, publishing new videos and building new quality of life programs in Spanish. Philanthropy remains critical for these outreach strategies that are making an impact, improving research outcomes and the participant experience.
David Ding ’20, a UC San Diego alumnus and co-owner of the engineering firm Flurida Group Inc., wants to make an impact on Alzheimer’s research. “Alzheimer’s affects millions of families every year,” he says. “While more and more people are becoming aware of this disease, the field is still in its infancy.” In recognition of the need to support emerging scholarship in this area, the Ding family established the Flurida Alzheimer’s Disease Emerging Scholars Research Fund in 2020.

As the first scholar to benefit from this generous support, Denis Smirnov successfully defended his doctoral thesis titled “Clinicopathologic Studies of Alzheimer’s Disease and Related Dementias” in 2021. His findings underscore the urgent need to develop criteria to distinguish between the atypical manifestations of pure Alzheimer’s disease and many understudied, related dementias.

“Reflecting on his PhD journey, Denis is grateful for the resources he found at SMADRC and for the freedom provided by the Flurida scholarship. “I wasn’t tied to a premade project,” he says. “I was able to explore my own ideas and collaborate with experienced pathologists, neuropsychologists and clinical neurologists, which would not have been possible in a smaller lab setting without this support.” Denis hopes his dissertation will help specify the diagnosis process and contribute to the development of appropriate treatments for those experiencing cognitive impairment.

“The Ding family is very proud to support the important work of emerging scholars such as Dr. Smirnov,” says David. “These researchers are bringing much-needed attention to the field by devoting their time and careers to helping end Alzheimer’s for good.”
ENRICHING THE QUALITY OF LIFE

The social and emotional challenges of coping with cognitive changes can feel insurmountable at times. At SMADRC, staff, researchers and volunteers offer a wide range of creative and supportive opportunities to recharge and build community through free, accessible quality of life (QoL) programs.

Joyce Camiel took part in a number of QoL programs and now serves as a facilitator. “I walk away feeling like I am paying it forward,” says Joyce. “I love helping others gain insight into their own journey, just as others helped me when I was a caregiver.”

SMADRC’s dynamic QoL programs provide support for diagnosed individuals and family members or caregivers. Monthly docent-led tours of Balboa Park art museums, quarterly photography workshops, early onset support groups, and virtual offerings in English and Spanish provide participants much-needed comfort and camaraderie.

Professional staff members and student trainees recognize the importance of engaging in meaningful QoL activities to exercise intact abilities and reduce depression and agitation in participants. “All of us need to keep working with all the tools at hand to stop the disease before it starts,” says program facilitator Jayne Slade. “I am giving back to this community by using the knowledge I gained assisting others.”

Partially funded by a federal research grant and elevated by generous philanthropic gifts, these essential memory care programs attend to the whole person, helping increase socialization, which is critical to fighting cognitive decline and improving quality of life.

BY THE NUMBERS

30+ grants supported by Shiley-Marcos Alzheimer’s Disease Research Center resources

13 awards for excellence in training

104 hours of professional training delivered
Blood tests to identify biomarkers are transforming research in Alzheimer’s disease and other neurodegenerative disorders. Douglas Galasko, MD, a professor in the Department of Neurosciences at UC San Diego School of Medicine, is working with investigators at SMADRC to develop promising new blood tests for diagnosing Alzheimer’s, even when symptoms are still mild.

Confirmation of an Alzheimer’s diagnosis has traditionally relied on brain imaging or the examination of cerebrospinal fluid (CSF). These tests are expensive and involve radiation (PET scans) or a lumbar puncture. However, recent advances in blood testing show potential to support the diagnosis of Alzheimer’s without these more invasive methods.

This is why SMADRC maintains a biorepository for blood and CSF samples from people with typical and atypical dementias as well as from normal controls. These samples cover different ages of disease onset as well as genetic and other risk factors. They can be used to measure the effects of vascular risk and inflammation, and even detect the impacts of COVID-19 infection on cognition.

SMADRC recently acquired the leading-edge Lumipulse machine to study samples in the biorepository in depth, generating new data in the fight to detect and eradicate Alzheimer’s. Philanthropic contributions enhance this vital research and help investigators like Dr. Galasko and his team continue to develop more accessible tools for early diagnosis, create effective therapies and advance scientific breakthroughs.
MAKING AN IMPACT THROUGH ART
ONE DONOR’S CREATIVE GIFTS

The Renner family has a long history of giving. “My mom was one of the more generous people in my life,” says Matt Renner, a professional scientist and, as it turns out, an artist who makes beautiful, complex jigsaw puzzles in his San Diego garage. “The dynamic went something like this: My dad would make a new cool art project, and then my mom would give it away to a friend and get him to make another one.”

Matt began woodworking more than ten years ago. He has found joy in donating the proceeds to local causes like pediatric cancer research, wildfire relief and, recently, SMADRC. “My dad had Alzheimer’s and was seen at Shiley,” he says. “So, it seems natural.”

At SMADRC, volunteers, researchers and donors like Matt, come together to help build a diverse community of people across our region committed to eradicating Alzheimer’s disease and related memory disorders.

From offering Spanish-language support programs to funding our emerging scholars and research faculty, SMADRC is dedicated to expanding our community and improving outcomes for patients and their families.

With a talent for creating art passed down from his dad and a desire to give back inspired by his mom, Matt turned what he calls a therapeutic hobby into philanthropic impact. We are grateful for the Renner family’s compassion and Matt’s commitment to moving us forward into a healthier future.

**Matt Renner**

**One of Matt Renner’s jigsaw puzzles**
At SMADRC, philanthropic support creates limitless possibilities in scientific learning, exploration and discovery that can transform lives.

Your support for our Spanish-language research is especially meaningful. Latinos are disproportionately affected by neurocognitive disorders. To shift this disparity, we actively recruit participants from these diverse populations to increase our knowledge of this major public health problem. In this way, we seek to ensure that all populations will benefit from our research to prevent or delay Alzheimer’s disease.

Contributions to our work advance this groundbreaking research and immediately help to mitigate the impacts of neurocognitive disorders across our diverse San Diego community. We couldn’t do it without you.

Gifts of all sizes play an important role in sustaining our momentum. The innovative, inclusive research of SMADRC’s faculty and early career investigators is making a real impact on human health and well-being, thanks to the essential support from our generous donors.

Please help us in propelling our next breakthrough!

To make a gift by check, mail to:

UC San Diego Health Sciences Advancement
Attn: Shiley-Marcos ADRC
9500 Gilman Drive, #0937 | La Jolla, CA 92093

To make a gift online, please visit:
giveto.ucsd.edu (enter fund “E2140” for the SMADRC)

For more information about how you can support SMADRC through estate giving, memorial gifts or volunteer opportunities, please contact:

Kim Wenrick
(858) 735-5137 | kwenrick@ucsd.edu

The Campaign For
UC San Diego

Your gift to the Shiley-Marcos Alzheimer’s Disease Research Center is part of the Campaign for UC San Diego — our comprehensive fundraising effort concluding on June 30, 2022. Together with our philanthropic partners, we will continue our nontraditional path toward revolutionary ideas, unexpected answers, lifesaving discoveries and planet-changing impact.

THANK YOU