

MIND Matters

SUMMER 2022

SPECIAL FEATURE

UCI MIND converges upon San Diego for AAIC

The San Diego Convention Center was bathed in purple in early August for the annual Alzheimer's Association International Conference, or AAIC. The conference drew thousands of investigators from around the world to share and learn about the latest advances in the field. Several dozen faculty, trainees, and staff from UCI MIND attended the event either in person or virtually, many presenting their latest work. Topics that dominated the conference this year included neuroimaging, biomarker discovery, and inclusion of underrepresented groups in clinical research. The conference also gave researchers, particularly trainees, the opportunity to network and collaborate with others in the field.

This year's conference included research talks ranging from lightening presentations to plenary lectures that were broad and given to audiences of 1000 or more on topics ranging from the implications of apathy to homelessness in dementia research and care. Hundreds of investigators presented posters of their latest findings. Eleven faculty members and graduate students from UCI MIND gave oral presentations while more than 35 UCI MIND staff, graduate students, and faculty presented posters. UCI MIND investigator and Professor of Neurology and Epidemiology, Maria Corrada, ScD, served on the planning committee for the massive gathering of researchers, clinicians, and advocates.

IN THIS ISSUE

**UCI MIND converges
upon San Diego for AAIC**

Buzzworthy Brain News

Evening on the Peninsula

Michael Chang Foundation

***A December to Remember* is back! In-person!**

Bright MINDs Shine at AAIC

Spotlight on 90+





Dear Friends of UCI MIND,

We hope that you had a summer full of sun, fun, and good health. As you can see in this issue of MIND Matters, it has been a busy summer here at UCI MIND. Our investigators played a prominent role at the annual Alzheimer's Association International Conference (AAIC), a focus of this issue (p 1, 3, 6, and 7). We're very proud of our own Maria Corrada, ScD, who played a role in planning this important meeting (p 1 and 7), as well as the many researchers who presented their work. As always, the meeting drew numerous headlines (p 3), as the world is hungry for information about ways to lower risk for dementia and treatments that can successfully combat disease.

The summer also saw headlines of a less positive nature, when Science magazine published "*Blots on a field*," an exposé into the alleged scientific misconduct of Alzheimer's investigators in New York and Minnesota. If true, the behaviors of these investigators are inexcusable. But the media's reaction to the story was overblown, and suggestions that these actions significantly slowed progress in the

field were incorrect. Indeed, just before sending this newsletter to print, we received word of the positive topline results from a Phase 3 clinical trial in early Alzheimer's disease of lecanemab, a monoclonal antibody against the amyloid beta protein. These results are further evidence of progress in the field and that we are on the right track.

Even with this major advance, however, there is substantial work left to be done to achieve our mission. We are grateful to have the support of so many in the local community, such as Harriet Harris, Bruce and Kiersten Allen, and Michael Chang (p 4 and 5). We hope you too may consider joining us at UCI MIND's signature annual fundraising event, *A December to Remember Gala* (p 5).



Joshua D. Grill

Joshua D. Grill, PhD
Director, UCI MIND

Faculty members

Anatomy & Neurobiology

Aileen Anderson, PhD
Tallie Baram, MD, PhD
Christine Gall, PhD, Chair
Alan Goldin, MD, PhD
Kei Igarashi, PhD
Gary Lynch, PhD
Steven Schreiber, MD
John Weiss, MD, PhD
Xiangmin Xu, PhD

Biological Chemistry

Wei Li, PhD

Biomedical Engineering

Gregory Brewer, PhD

Chemistry

James Nowick, PhD
Xiaoyu Shi, PhD

Developmental & Cell Biology

Edwin Monuki, MD, PhD
Ali Mortazavi, PhD
Diane O'Dowd, PhD
Xiaoyu Shi, PhD

Epidemiology

Maria Corrada, ScD
Karen Edwards, PhD, Chair
Daniel Gillen, PhD
Sunmin Lee, ScD

Medicine

Masashi Kitazawa, PhD
Steven Tam, MD

Microbiology & Molecular Genetics

Emiliana Borrelli, PhD
Alan Goldin, MD, PhD

Molecular Biology & Biochemistry

Charles Glabe, PhD
Andrea Tenner, PhD

Neurobiology & Behavior

Mathew Blurton-Jones, PhD
Jorge Busciglio, PhD
Carl Cotman, PhD
Christine Gall, PhD
Kim Green, PhD
Joshua Grill, PhD
Claudia Kawas, MD
Frank LaFerla, PhD, Dean
Michael Leon, PhD
Craig Stark, PhD
Vivek Swarup, PhD
Leslie Thompson, PhD
Marcelo Wood, PhD, Chair
Michael Yassa, PhD

Neurology

Tallie Baram, MD, PhD
Maria Corrada, ScD
Carl Cotman, PhD
David Cribbs, PhD
Mark Fisher, MD
Lisa Flanagan, PhD
Claire Henchcliffe, MD, DPhil, Chair
Claudia Kawas, MD
Albert La Spada, MD, PhD
Ira Lott, MD
Mark Mapstone, PhD
Tahseen Mozaffar, MD
S. Ahmad Sajjadi, MD, PhD
Steven Schreiber, MD
Gaby Thai, MD
John Weiss, MD, PhD
Michael Yassa, PhD

Pathology & Laboratory Medicine

Elizabeth Head, PhD, Vice Chair
Ronald Kim, MD
Albert La Spada, MD, PhD
Edwin Monuki, MD, PhD, Chair
Mari Perez-Rosendahl, MD
William Yong, MD

Pediatrics

Tallie Baram, MD, PhD
Virginia Kimonis, MD
Ira Lott, MD
Andre Obenaus, PhD

Pharmaceutical Sciences

Emiliana Borrelli, PhD

Physical Medicine & Rehabilitation

Aileen Anderson, PhD
Brian Cummings, PhD

Physiology & Biophysics

Kevin Beier, PhD
Alan Goldin, MD, PhD

Psychiatry & Human Behavior

Joshua Grill, PhD
Gary Lynch, PhD
Bryce Mander, PhD
Joan Steffan, PhD
David Sultzer, MD
Leslie Thompson, PhD
Michael Yassa, PhD

Psychological Science

Daniel Nation, PhD

Radiation Oncology

Charles Limoli, PhD

Statistics

Daniel Gillen, PhD, Chair
Bin Nan, PhD

Buzzworthy Brain News

Given its size and notoriety, AAIC is a meeting where researchers often share results from clinical trials and other newsworthy research studies. This year, several talks garnered the attention of the media. Here are just a few of the highlights:



EXERT

Much awaited topline results were presented for the EXERT study, a clinical trial of guided exercise in people with Mild Cognitive Impairment (MCI), for which UCI MIND was a trial site and Carl Cotman, PhD, was co-principal investigator. Unfortunately, the study failed to demonstrate a benefit of aerobic exercise in slowing cognitive decline compared to stretching. The study investigators were intrigued, however, by a comparison of the groups in EXERT to similar participants in the Alzheimer's Disease Neuroimaging Initiative (ADNI), which suggested that disease progression may have been slower in EXERT participants. Combined with open questions about exercise modality, duration, and intensity, these analyses signal the need for better understanding of the effects of physical activity in people with MCI.



Processed Foods

Investigators from the University of Sao Paulo Medical School in Brazil shared results from a large longitudinal study examining dietary habits and cognitive decline. Specifically, the group found that intake of ultra-processed foods, often rich in added fats and sugars, were associated with global cognitive decline and decline in executive function over an 8-year period. While certainly not definitive, the data suggest maintaining a diet low in processed foods may be an important component of steps to protect against cognitive decline.



Prevention Trial

Topline results were presented from a clinical trial of the monoclonal antibody crenezumab in pre-symptomatic autosomal dominant Alzheimer's disease, a rare, purely genetic and early onset form of the disease. Individuals who inherit gene mutations from parents with this form of the disease are destined to develop it themselves. One of the trial's principal investigators who presented at AAIC was also one of the speakers for this year's UCI MIND SoCal Alzheimer's Disease Research Conference, Jessica Langbaum, PhD, from the Banner Alzheimer's Institute. The overall results from the study did not show a clinically significant benefit of the drug in participants, who were from one of the largest kindreds of autosomal dominant disease in Columbia, South America. Important trends in the biomarker and cognitive data, however, may suggest that more studies of crenezumab are warranted.

Evening on the Peninsula

UCI MIND, in conjunction with Harriet Harris and the Living Large Legacy, hosted an Evening on the Peninsula at Bruce and Kiersten Allen's home on Thursday August 11, 2022.

The reception gathered influential members of the Orange County community, with the goal of increasing awareness of the personal, public health, and local impact of Alzheimer's disease and other dementias. UCI MIND investigators engaged in a lively question and answer session, amid sea breeze and a spectacular Newport Harbor sunset. With over 70 people in attendance, discussions exchanged were about laboratory and clinical research and the urgent need for accelerated progress.

The reception concluded with a call to action, with UCI MIND Leadership Council member Harriet Harris imploring those in attendance to support research, learn more about UCI MIND, and share these needs with their individual networks. The evening would not have been a success without a highly motivated and effective planning committee: Kiersten Allen, Sharon McLaughlin, Harriet Harris, Jennifer Taylor, Teri Elliott, Carole Harris, and Tara Shapiro.

(Top) Guests mingle near the water; (Middle, from left) David Sultzer, MD, Harriet Harris, Joshua Grill, PhD; Lindsay Hohsfield, PhD, Dr. Sultzer, Craig Stark, PhD, Dean Frank LaFerla, PhD; (Below, from left) Dr. Grill with hosts Bruce and Kiersten Allen at their home



Michael Chang Foundation



(From left) The Tennis Tournament included an exciting silent auction. Michael Chang listens from center court as a photographer captures Joshua Grill, PhD speaking to the tournament attendees.

The Michael Chang Foundation held their annual 3-day tennis tournament on July 22nd - 24th. Michael Chang personally selected UCI MIND as the beneficiary for this year's event. The exciting weekend featured large tournaments that allowed UCI MIND to share our work with the community and expose new audiences to our research mission. The final day of the tournament concluded with celebrity exhibition matches featuring Michael Chang, his daughter Lani (who is ranked for under 12), and James Blake, among others. At the break of the main celebrity exhibition match, UCI MIND Director Joshua Grill, PhD, was able to share more about UCI MIND's mission from center court.



A December to Remember Gala is back! In-person!



RSVP Today!

You are cordially invited to the 12th Annual *A December to Remember* Gala honoring Dean Frank LaFerla, PhD, benefiting Alzheimer's research at UCI MIND.

Please join us on **December 3, 2022** at the **Balboa Bay Resort** to raise funds to make memories last a lifetime.

For information on tickets and tables, go to **gala.mind.uci.edu**

For information on sponsorship and underwriting opportunities, please contact Linda Scheck at **949-824-3251** or **LScheck@uci.edu**

Learn More:
gala.mind.uci.edu

Thank you to our donors



To make a gift, call **949.824.3251**
or visit **www.mind.uci.edu/donate**

Gifts of \$100,000+ (Jun. '21- '22)

Anonymous
Brethren Community Foundation
The Crean Foundation
Draper Family Foundation
Jacqueline DuPont Carlson, PhD & Marc Carlson
The Leandro P. Rizzuto Foundation
Carla Liggett
and Arthur S. Liggett, M.D.
The Women's Alzheimer's Movement

Gifts of \$50,000+ (Jun. '21- '22)

Anonymous
Joan & Don Beall

* Indicates multiple donors

Gifts of \$5,000+ (Jun. '21- '22)

Anonymous *
1996 David E. Griswold Marital Trust
Paul & Sydney Balalis
Joan & Don Beall
Lorna Seema Carlin, M.D.
Crevier Family Foundation
Richard & Billie Deihl
Barbara J. Dove, C.P.A.
Eastern Produce Council, Inc.
The Eichenberg-Larson Char. Fdn.
Richard & Mary Godber
HFC
Stephen & Janice Hamill
Harris Taylor Family Foundation
John & Debra Hornsby
J. Stanley & Mary W. Johnson Family Foundation
Frank & Susan Kavanaugh

Gifts of \$5,000+ (continued)

Roger Lisabeth
The Loeb Family
Masonry Fireplace Industries, Inc.
Don & Sharon McLaughlin
Phillip & Lois Matthews
Suzanne G. Melin
Robert & Virginia Naeve
Nobbs Family Foundation
Jeffrey & Diane Osborn
Alvin Pfeiffer
Ann & Charles Quilter
The Reese Family
The Salter Family
Richard & Lia Salus
Dr. Diane Silber
Jo Skibby
Sperry Commercial, Inc.,
& Sperry Equities, Inc.
Joseph H. Stahlberg Foundation
Ueberroth Family Foundation

Gifts of \$5,000+ (continued)

Willametta K. Day Foundation
F. Michael and Roberta Simmons
Wong Foundation

UCI MIND Legacy Society

(Donors who have included UCI MIND in their estate plans)
Anonymous*
Shirley Bloom
Lorna Seema Carlin, M.D.
William Robert Chase, D.D.S.
Evelyn Freed
Bill P. Harris
& Sheila Finnegan Harris
Paul Hunter
Carol Murrel
Richard & Nancy Muth
In Memory of
Patricia Ruth O'Leary
Karen Rockel Speros

Bright MINDs Shine at AAIC

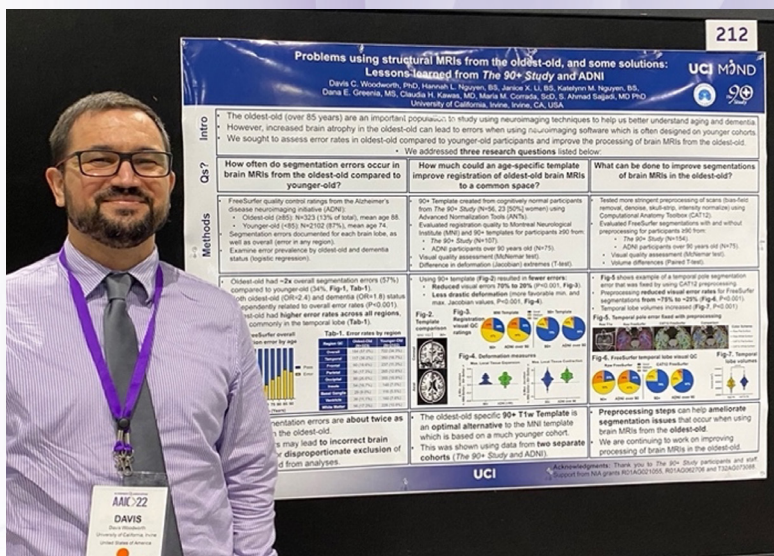
UCI MIND graduate students, Adam Birnbaum (Gillen lab), Marina Ritchie (Grill lab), and Thabat Dahdoul (Gillen lab), were invited to give "lightning" presentations about their research. Adam presented his work on cohort effects in Alzheimer's trials; Marina discussed racial and ethnic differences in the psychological responses to biomarker disclosure; and Thabat presented data from her research looking at sex differences in Alzheimer's disease trials. UCI MIND faculty members, Vivek Swarup, PhD, Kim Green, PhD, and Mark Mapstone, PhD, delivered presentations at special pre-conference meetings, convened by the Alzheimer's Association and National Institute on Aging. Drs. Swarup and Green discussed their research in the MODEL-AD program, and Dr. Mapstone presented new results from the Alzheimer's Biomarker Consortium – Down Syndrome (ABC-DS).

Several UCI MIND faculty, staff and trainees presented posters at AAIC this year:

1. **Jenna Adams, PhD, a postdoctoral fellow in the Yassa lab, presents her work on brain networks and Alzheimer's pathology.**
2. **Kyle Conniff, a graduate student in the Gillen lab, speaks with Deborah Levy, Executive Director of the Alzheimer's Association, Orange County Chapter, about his research on retaining American Indian and Native Alaskan participants in longitudinal Alzheimer's research.**
3. **Arunima Kapoor, a graduate student in the Nation lab and a REMIND co-chair, presents her research on blood biomarkers of cerebrovascular health in older adults.**
4. **Postdoctoral scholar Michael Vu, PhD, and UCI MIND faculty member Mark Mapstone, PhD, pose next to their poster describing associations between blood metabolites and markers of brain activity.**
5. **Gierde Milinkeviciute, PhD, a project scientist in the Green lab, presents genetic studies she has done on the MODEL-AD project.**
6. **Graduate student Emily Miyoshi speaks to a group of AAIC attendees about work she has done in the Swarup lab on gene expression in different brain regions in a mouse model of Alzheimer's disease.**
7. **Project scientist and epidemiologist Christian Salazar, PhD, MPH, poses with co-author and former UCI MIND staffer, now a graduate student at University of Michigan, Chelsea Cox, MSW, MPH, next to their poster about attitudes towards biomarker disclosure in Mild Cognitive Impairment trials.**
8. **Adam Birnbaum in the Gillen lab presents his work on cohort effects in Alzheimer's trials.**



Spotlight on 90+



Investigators from the 90+ Study were heavily featured at AAIC this year. Maria Corrada, ScD, an epidemiologist and co-principal investigator (co-PI) for the 90+ Study presented neuroimaging findings from a first-of-its kind ethnically diverse cohort study of individuals 90 and older, the Life After 90 Study. Though few conclusions could be made, the data available suggested that, on average, Black individuals have the lowest amyloid burden but highest white matter hyperintensity (WMH) volume while Latino individuals have the highest average amyloid burden and lower WMH volumes. Until now, neuroimaging investigations in ethnoracially diverse oldest-old individuals has been extremely limited. The novel work presented at AAIC will help researchers understand contributors to the observed racial/ethnic disparities in rates of dementia and Alzheimer's.

Ahmad Sajjadi, MD, PhD, a neurologist and UCI MIND faculty member presented results from participants in the 90+ Study on a newly described form of dementia called limbic predominant age related TDP-43 encephalopathy (LATE). Dr. Sajjadi showed that half of all subjects from the 90+ Study with dementia who came to autopsy showed LATE pathology and while there were very few differences in the clinical presentation of people diagnosed at autopsy with LATE vs. those with Alzheimer's disease, impairments in orientation may distinguish the two diseases in this population.

Staff members from the 90+ Study, like Zarui Melikyan, PhD, presented posters virtually on the link between sleep duration and Alzheimer's disease pathology in the oldest old.

Co-PI Dr. Corrada (above, left) speaks at AAIC. Co-PI Claudia Kawas, MD (middle, left) attends a plenary talk with Mary Sano, PhD. Davis Woodworth, PhD (below, left), a postdoctoral scholar in the lab of Ahmad Sajjadi, MD, PhD, presented methodological work he has done to improve the quality of MRI data from research participants 90 years and older in the 90+ Study.



Institute for Memory Impairments
and Neurological Disorders
2643 Biological Sciences III
Irvine, CA 92697-4545



This newsletter is supported in part
by the California Department of Public
Health, Alzheimer's Disease Program.
Funding is pursuant to California Health
and Safety Code Section 125275 – 125285.



CONTACT US

General Information

mind.uci.edu
ucimind@uci.edu

Education & Outreach

949.824.9896
mwitbrac@uci.edu

Giving Opportunities

949.824.3251
Lscheck@uci.edu

Research Participation

949.824.0008
research@mind.uci.edu



Connect with us
on social media!

UPCOMING EVENTS

RSVP Today!

A December to Remember

Annual UCI MIND Gala Honoring Frank LaFerla, PhD
Saturday, December 3, 2022 | gala.mind.uci.edu

Ask the Doc Video Series

Guest Experts from UCI MIND

New Episodes Monthly
UCI MINDcast | mind.uci.edu/mindcast

Spotlight on Care Podcast Series

Steve O'Leary, Virginia Naeve, & Guests

New Episodes Regularly
UCI MINDcast | spotlightoncare.com



Past education sessions are archived on
UCI MINDcast and youtube.com/ucimind