ISSUE NO. 3 | WINTER 2025

UCLA BRI Newsletter

Inside This Edition

***On the Cover**: Curiosity comes to life! From touching a real human brain to suiting up for hands-on neuroanatomy, students experienced the thrill of discovery during Brain Awareness Week—one of many moments of hands-on discovery that make neuroscience exciting for the next generation. Read more on page 13.*

UCLA Brain Research Institute

FROM THE DIRECTOR'S DESK

The other day I wrote a column for you on the beauty and strength of our diversity, including our diversity of opinions - academic freedoms that are currently under threat. But today, seeing the layoff of 10,000 Health and Human Services Department employees - the folks who administer our grants from the government, I felt we needed a slightly different message.

UCLA is special: we are chock full of great minds on a small campus so we run into each other a lot and get to share and incubate great ideas between our different disciplines, It is the ideal place to foster interdisciplinary research which is the future of science - especially neuroscience. Our diversity of thought coming together makes us better able to solve the hard problems of neuroscience (studies show). Respect for one another's differences helps us all grow individually and be stronger as an organization while we unite under the common goal of understanding the nervous system: how we and every animal on the planet works. It is this unity of purpose that I want to emphasize today.

Unity of purpose, helpful behaviors toward one another during these times of duress will allow us to survive the attacks on science that would prevent us from understanding ourselves and the world around us. We can respond to the chaos being sewn in government with a calm gathering of internal resources and an appeal to other rational lovers of understanding: those who sincerely want to advance knowledge both for knowledge's sake and to translate this knowledge to improve the length and quality of our lives.

Together we can both celebrate our diversity and stand together with unity of purpose, helping one another, preserving the fullness of our diverse expertise and training and even elevating our level of inquiry by sharing our resources with each other. We did it with the recent fires, inviting our colleagues to stay in our home while they were evacuated; forming even closer bonds in adversity. We can use all our ingenuity to come together and weather this human-made disaster and emerge on the other side better bonded, more capable of collaboration, with more community partners and better science communication and new ideas born of these closer ties and increased interactions across our campus and with other institutions.

Let's each of us look out for one another. If you see a colleague hurting, help them and call for help. The BRI is here and growing stronger, working with your Chairs and Deans and our Chancellor and Vice Chancellors as well as with leaders at other neuroscience research institutions to mobilize timely assistance and stopgaps so that scientific breakthroughs can continue. Together we thrive.

Our ability to withstand this uncertainty and continue groundbreaking work is made possible by the generosity of those who believe in science. Thank you to our donors, partners, and everyone who makes the BRI a force for innovation. Any one of our voices may be weak, but together we are strong. We need to preserve and uplift our diversity to answer the big, important, difficult-to-answer questions. So let's come together. Segregated we are diminished. Divided we fall. United for each other and for neuroscience we stand, and diverse we stand strong.

To that end, come to our Tuesday Social hours at 4 PM in Gonda so that instead of feeling alone and shaken, we can take comfort in our collective intelligence and delight in the gorgeous diversity of our community. Come to our JSN seminars each Tuesday at noon in the NRB auditorium.

Feeling tired? Come get inspired! Read on to see all the happenings and wins in our community and see how you can get involved and make our incredibly talented community of neuroscientists across campus strong.

- Dr. Gina Poe, Director of UCLA BRI

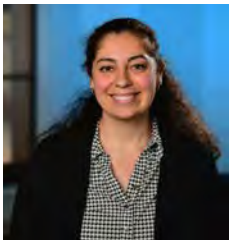
UCLA faculty and trainees unite at the Wilshire Federal Building for Stand Up for Science 2025, advocating for continued support, funding, and recognition of science's vital role in shaping our future.

RESEARCH BRIEFS

The BRI community continues to push the boundaries of neuroscience, uncovering fascinating insights into brain function, behavior, and mental health. In this edition, we highlight four groundbreaking studies: how antidepressant use during pregnancy impacts fetal development, how the brain links memories through dendritic mechanisms, how prefrontal circuits shape threat avoidance from adolescence to adulthood, and how stress alters neural pathways to disrupt agency and promote habit formation. These discoveries not only deepen our understanding of the nervous system but also offer new directions for research and potential clinical applications.

Safety in treatment: Classical pharmacotherapeutics and new avenues for addressing maternal depression and anxiety during pregnancy

The safety of antidepressant use during pregnancy remains controversial owing to an incomplete understanding of how drug exposure affects fetal development, brain maturation, and behavior in offspring. This leaves pregnant women especially vulnerable, as pregnancy can be a highly stressful experience for many individuals, with stress being the biggest known risk factor for developing a mood or anxiety disorder. In this review article, Dr. Merel Dagher, Dr. Catherine Cahill, and Dr. Anne Andrews focused on perinatal pharmacotherapy for treating mood and anxiety disorders, highlighting the current knowledge and gaps in our understanding of consequences of treatment.



Dr. Merel Dagher, Ph.D.
Postdoctoral Fellow, UCLA

Dr. Catherine Cahill, Ph.D.
Professor, Psychiatry and Biobehavioral Sciences, UCLA

Dr. Anne Andrews, Ph.D.
Professor, Psychiatry and Biobehavioral Sciences, UCLA

The team found that drug classes such as selective serotonin reuptake inhibitors and serotonin norepinephrine reuptake inhibitors appear to have limited adverse effects on fetal health and child development. In the face of an increasing prevalence of major mood and anxiety disorders, they assert that individuals should be counseled before and during pregnancy about the risks and benefits of antidepressant treatment given that withholding treatment has possible negative outcomes. Moreover, newer therapeutics, such as ketamine and κ-opioid receptor antagonists, warrant further investigation for use during pregnancy.

Compartmentalized dendritic plasticity in the mouse retrosplenial cortex links contextual memories formed close in time

Megha Sehgal, Ph.D.
Assistant Professor
Department of Psychology
The Ohio State University

Alcino J. Silva, Ph.D.
Professor
Department of Behavioral Neuroscience, UCLA

Events occurring close in time are often linked in memory, providing a framework for those memories. A UCLA research study led by Dr. Megha Sehgal, Assistant Professor at Ohio State University, and Dr. Alcino Silva at the UCLA BRI used in vivo longitudinal imaging of neuronal somas, dendrites, and spines along with activity-dependent manipulations of these compartments. The team showed that the organization of multiple memories is not only dependent on neuronal overlap in the retrosplenial cortex but also on branch-specific dendritic allocation mechanisms. These results reveal a novel set of rules that govern how linked and independent memories are allocated to dendritic compartments.

RESEARCH BRIEFS

Developmentally distinct architectures in top–down pathways controlling threat avoidance

The medial prefrontal cortex (mPFC) is critical for learning and decision-making processes, including responding to threats. The protracted maturation of mPFC extends into early adulthood, but how circuit development relates to behavioral development remains unclear. In this study, the DeNardo lab used threat avoidance as an entry point to address these questions, finding that juveniles and adolescents have lower levels of threat avoidance than adults.

Cassandra B. Klune, Ph.D.
Medical student, University of Alberta

Caitlin M. Goodpaster
Neuroscience Ph.D. student, NSIDP, UCLA

Laura A. DeNardo, Ph.D.
Assistant Professor, Physiology, UCLA

The team recorded and manipulated circuit activity in vivo to establish causal links between frontolimbic activity and threat avoidance strategies of juvenile, adolescent, and adult mice. They uncovered multiple developmental switches in the behavioral roles of mPFC circuits targeting the nucleus accumbens and basolateral amygdala that were accompanied by pathway-specific synaptic changes. Their results revealed how developing mPFC circuits pass through distinct architectures that may make them optimally adapted to age-specific challenges.

A dual-pathway architecture for stress to disrupt agency and promote habit

Jacqueline R. Giovanniello, Ph.D.
Postdoctoral Scholar, UCLA

Kate M. Wassum, Ph.D.
Assistant Professor, Psychology, UCLA

Stress can disrupt our agency. It can prevent us from learning that our actions can bring out desirable or undesirable outcomes and rob us of the power to use this knowledge to envision our goals so that we can make thoughtful decisions that serve our interests. Instead, stress can cause us to fall into rigid habits. A BRI team led by Dr. Jackie Giovanniello and Dr. Kate Wassum explored the brain pathways through which stress disrupts agency and promotes habit. Their study focused on pathways from the amygdala, a brain hub for emotional learning, and the dorsomedial striatum, the brain hub for action-outcome learning that supports agency.

They discovered that whereas the basolateral amygdala->dorsomedial striatum pathway is activated by earned rewards to enable the formation of the action-outcome knowledge that supports agency, the parallel central amygdala->dorsomedial striatum pathway supports the formation of routine habits. They then found that chronic stress can disrupt agency and promote habit with a one-two punch to the brain. Chronic stress dials down the basolateral amygdala->dorsomedial striatum pathway activity needed to learn the agency that supports flexible, well-informed decisions. It then dials up activity in the central amygdala dorsomedial striatum pathway, causing the formation of rigid, inflexible habits.

These findings help us understand how stress can promote maladaptive habits and the neuronal circuit mechanisms through which we might intervene to restore agency.

BRI STAFF SPOTLIGHT

Meet more of our outstanding BRI staff members whose hard work keeps everything running seamlessly. They are part of a dedicated team working behind the scenes to support research, education, events, and community initiatives.

RIN EWALT

Financial Services Analyst, BRI

Rin Ewalt serves as a Financial Services Analyst of the BRI as well as the Project Coordinator for the UCLA-CDU Dana Center. She works closely with the various Affinity Groups and Integrative Centers of the BRI to serve their needs and helps run the Fellowship Program with her Dana Center team to better support community-partnered neuroscience. Rin is a newer member of the BRI team, but she is looking forward to meeting new people and learning the ins and outs of UCLA as she grows her role! In her spare time, Rin enjoys creative writing, various arts and crafts, and archery (when the weather is nice outside).

PRIYANKA SAMRA

Financial Services Analyst, BRI

Priyanka Samra serves as a Financial Services Analyst of the BRI, along with serving as the Training in Neurotechnology Translation (TNT) coordinator. In addition to her role in assisting with the T32 grant renewal, Priyanka is involved in event planning, including organizing and managing speaker visits for the TNT program, as well as planning symposiums and the LA Brain Bee. A native of Oregon, Priyanka enjoys hiking, exploring the outdoors, writing poetry and short stories, and cooking.

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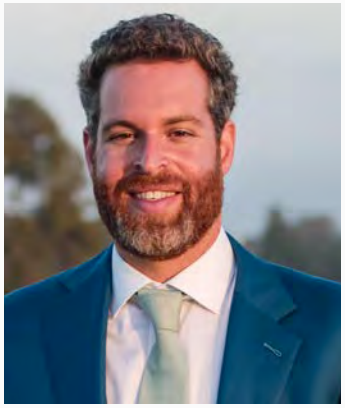
SAY HELLO TO OUR NEWEST BRI MEMBERS



DR. AVI SAMELSON
Assistant Professor, Department of Neurology

DR. ROSALIE LAWRENCE
Assistant Professor, Department of Biological Chemistry

DR. IMAAD NASIR
Assistant Clinical Professor, David Geffen School of Medicine

DR. KUNAL PATEL
Assistant Professor In Residence, Department of Neurosurgery

DR. ERAKA BATH
Psychiatrist/Associate Professor, UCLA School of Medicine

DR. JOEL ZYLBERBERG
Associate Professor of Physics and Astronomy

DR. CEYLAN CANKURTARAN
Associate Professor of Radiology, Health Sciences

DR. NINA HARAWA
Professor, Department of Medicine

DR. SAHIB KHALSA
Director of Anxiety Disorders Research, Health Sciences.

Read more about our members here.

FACULTY SPOTLIGHT

SLOAN RESEARCH FELLOWSHIP

Chuchu Zhang, Ph.D.
Assistant Professor, Physiology and Neurobiology, David Geffen School of Medicine at UCLA

The Sloan Research Fellowships recognize exceptional creativity, groundbreaking innovation, and outstanding research achievements - qualities that define the next generation of scientific leaders. Dr. Chuchu Zhang, assistant professor in Physiology and Neurobiology at UCLA is named a 2025 Sloan Research Fellow.

Nausea can be caused by an array of pathogens, poisons, and diseases, but the sensory neuroscience behind it remains poorly understood, and the clinical management of nausea is often ineffective. Zhang's research focuses on uncovering the physiology, neural circuitry, and molecular basis of nausea — including nausea caused by food allergies, food poisoning, and pregnancy. By combining genetic tools with animal models and using imaging, electrophysiology, natural product screening, and RNA sequencing, her laboratory is working to define stimulus-specific nausea mechanisms and to improve current treatments.

THE PRADEL RESEARCH AWARD

The Pradel Research Award is presented annually to recognize mid-career neuroscientists whose work is making major contributions to our understanding of the nervous system. The award is presented with a $50,000 research award to designate to an institution of the recipient's choice to support neuroscience research.

Dr. Anne Churchland, University of California, Los Angeles, will receive the 2025 Pradel Research Award. Churchland has made seminal contributions to our experimental and theoretical understanding of the neural computations underlying sensory guided behavior and decision making.

Anne Churchland, Ph.D.
Professor, Neurobiology, David Geffen School of Medicine at UCLA

CIRM GRANTS FOR STEM-CELL BASED THERAPIES

Aparna Bhaduri, Ph.D.
Assistant Professor, Biological Chemistry, David Geffen School of Medicine at UCLA

Scientists at UCLA have received $21.8 million in grants from the California Institute for Regenerative Medicine (CIRM), the state's stem cell agency, to develop and advance new stem cell-based treatments.

Dr. Aparna Bhaduri, assistant professor of biological chemistry, has received $10.3 million foundational research award which will support her work to uncover metabolic drivers of neuropsychiatric disorders.

Dr. Bhaduri and collaborators will use stem cell-derived 3D brain organoid models grown from samples from patients with schizophrenia and autism spectrum disorder to compare how metabolism drives development in a healthy versus disrupted environment.

FACULTY SPOTLIGHT

BRI faculty named fellows of the American Association for the Advancement of Science

We are proud to share that Dr. Stephanie White and Dr. Barney Schlinger have been elected 2025 Fellows of the American Association for the Advancement of Science (AAAS)—one of the most prestigious honors in science, recognizing extraordinary contributions to research, innovation, and education.

A leader in behavioral neuroendocrinology, Professor Schlinger explores how hormones shape brain structure and function to regulate complex behaviors in vertebrates, with a focus on songbirds. His lab has studied species from jays to sparrows and developed a model system based on the courtship behavior of the golden-collared manakin, a tropical bird from Panama. His research integrates neuroendocrinology with anatomy, physiology, and evolutionary biology.

DR. BARNEY SCHLINGER
Professor of Integrative Biology & Physiology and Ecology & Evolutionary Biology

DR. STEPHANIE WHITE
Professor of Integrative Biology & Physiology

Professor White, director of UCLA's Undergraduate Neuroscience Program, investigates how the brain enables communication. Her research focuses on how social interaction shapes gene expression and neural circuits involved in song learning in birds, leading to insights into the FoxP2 gene—linked to vocal behavior and speech-related disorders such as autism.

Additionally, **Dr. Roger Wakimoto has been elected to the AAAS Board of Directors**, further amplifying UCLA's voice in shaping national scientific priorities.

Dr. Wakimoto has been elected to the Board of Directors of the American Association for the Advancement of Science (AAAS). An atmospheric scientist specializing in mesoscale meteorology, Dr. Wakimoto has previously served in leadership roles at the National Center for Atmospheric Research, the National Science Foundation, and as president of the American Meteorological Society. In his candidate statement, he emphasized the importance of AAAS in addressing climate change, advancing diversity and inclusion in science

These honors reflect the excellence and leadership within the BRI community—and we celebrate their achievements as an inspiration to all.

DR. ROGER WAKIMOTO
UCLA's vice chancellor for research and creative activities.

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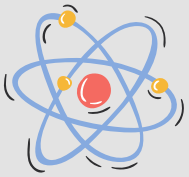
WHAT'S NEW AT BRI

BRI SCIENCE COMMUNICATION WORKSHOP



On April 14th, join the Alan Alda Center for Communicating Science for an interactive workshop on sharing your research with the public.

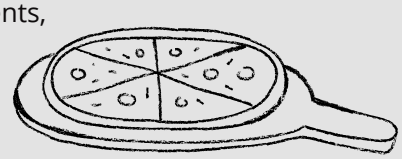
Keep an eye out on your inbox for more details!
Limited spots available | Questions? Contact Ethan Snook at esnook@mednet.ucla.edu.

BRI RESEARCH-IN-PROGRESS SEMINAR (RIPS) SERIES

Check out the new RiPS Seminar Series! Join fellow trainees to tackle experimental hurdles, discuss data challenges, and brainstorm solutions in a relaxed setting—every Wednesday, 4:00–5:00 PM, in Gonda 1357, starting February 5. Present your scientific concerns, collect feedback, and collaborate on fixes with pizza and beer! **Interested in presenting? Sign up here** or contact Dr. Michael Ryan at michaelryan@mednet.ucla.edu.

BRI SOCIAL HOUR

Join us every Tuesday at 4:00 PM in the Gonda first-floor conference room! Connect with peers from across disciplines, share your lab's latest successes, and discuss groundbreaking research in a welcoming environment. Everyone is invited—undergraduates, graduate students, staff researchers, and PIs. Come share, collaborate, and celebrate together! Contact Ethan Snook at esnook@mednet.ucla.edu for questions



PINT OF SCIENCE 2025

We are very excited to announce that Pint of Science will be back in Los Angeles in 2025, after the success of last year's comeback!

Pint of Science is a worldwide science festival bringing together researchers to share their scientific discoveries with the general public in a relaxed environment. Save the date! On the nights of **May 19-21, exciting scientific topics will be discussed in bars and pubs** in more than 500 cities across 27 countries. The events are organized by an amazing team of BRI members and are sponsored by the BRI.

FUNDING OPPORTUNITIES

BRIDGE GRANT OPPORTUNITY

This bridge funding is specifically intended to help early faculty who have an unfunded NIH grant application that was submitted within the last 18 months and have received a summary statement on their proposal. This funding will support the faculty member and provide additional time for productivity as they strengthen their proposal for resubmission.

DGSOM's OPSCD is pleased to announce the OPSCD Bridge Grant for highly qualified junior physician-scientist faculty and trainees. Eligible physician-scientists are invited to apply for a bridge grant of up to $100,000 if their department is willing to commit to covering 50% of the total budget.

IMPORTANT DATES

Application due date: April 30 at 5:00 PM
Award notification: ~ June 2025
Funding period: July 2025 – June 2026

WHO MAY APPLY

Applicants must:

- Be a full-time UCLA DGSOM junior faculty, fellow, or resident, including clinical instructors, seeking an independent research career (Please refer to the NIH definition of an early-stage investigator).
- Have a clinical appointment.
- Plan to resubmit an NIH application (resubmission or new submission) in response to the review within the next 12 months, with a preference for projects that plan to resubmit within 6 months.

You may visit the OPSCD Website to submit your online application (Located in "DGSOM Bridge Grants" under "Funding Opportunities").

UCLA CART

The UCLA Center for Autism Research and Treatment (CART) invites applications for grants to fund pilot and/or feasibility studies for biomedical, epidemiological, or behavioral research. This funding is made available with departmental "Autism Initiative" funds to CART and matching funds via the UCLA CTSI Voucher Fund. UCLA CART houses several ACE Networks funded by NIH as part of a nationwide set of research programs. UCLA CART activities are wide-ranging and include the integration of clinical, imaging, genetic, and basic science research to create a synergistic milieu that maximizes the productivity of the participants and attracts other investigators to the field of autism.

IMPORTANT DATES

Please email the complete application as one PDF with the subject line: "CART/CTSI Pilot Grant," on or before Friday, May 16, 2025, by 5 pm to the CART Director of Operations: Monica Belli Haley, mbelli@mednet.ucla.edu.

If you have questions, contact Monica Belli Haley at e-mail: mbelli@mednet.ucla.edu.

AWARD AND SCHOLARSHIPS CALLS

CAROL MOSS SPIVAK SCHOLARSHIP

Congratulations to our **2024-2025 Carol Moss Spivak Scholars, *Dr. Vanessa Casha and Dr. Flora D'Oliveira da Silva!*** Read more about them here.

The BRI invites applications for two Carol Moss Spivak Scholars.

Carol Moss Spivak (1934-2017) was known for her philanthropy, which was often directed toward health initiatives here at UCLA. Two postdoctoral scholars will be awarded up to $25,000 each to be used towards research expenditures like conference travel, equipment, experiment-running costs, and publication costs. There is no citizenship requirement. This scholarship is for one year (2025-2026) academic year. More information on deadline coming soon.

Vanessa Casha, Ph.D.
Postdoctoral Researcher

Flora D'Oliveira da Silva, Ph.D.
Postdoctoral Researcher

CALL FOR GRADUATE STUDENT AWARDS

The BRI invites nominations for two graduate student awards for excellence in a neuroscience area, the **Eva Kavan Prize for Excellence in Research on the Brain**, and the **Thirty-Third Annual Samuel Eiduson Student Lecture Award** for a commendable peer-reviewed publication.

Dr. Kavan established a fund in 1999 to award an annual prize to a graduate student for excellence in the field of basic research in neuroscience. The recipient of this award must be a U.S. citizen or permanent resident and will receive either a $500 gift card (or deposit into their Bruin account) or a $1,000 travel award and a Certificate of Merit to be presented at the annual Magoun Lecture.

The Eiduson Award was initiated in 1993, and named in honor of Dr. Sam Eiduson, the first Chair of the Interdepartmental Ph.D. Program for Neuroscience. This award recognizes an outstanding graduate student in neuroscience who has done especially commendable work during his or her dissertation research -- work that has led to peer-reviewed research manuscripts that have been published or are in press. The awardee will receive either a $600 gift card (or deposit into their Bruin account) or a $1,500 travel award, Certificate of Merit, and present the Eiduson Student Lecture scheduled for Spring 2025 in the Joint Seminars in Neuroscience series.

If you are a student eligible for either of these awards, please ask a BRI faculty member to nominate you. **Faculty members can submit nominations by completing the online form and uploading a short nomination letter, the student's CV, and any relevant materials** here.

Applications are due **Sunday, April 6, 2025: 11:59 pm**.

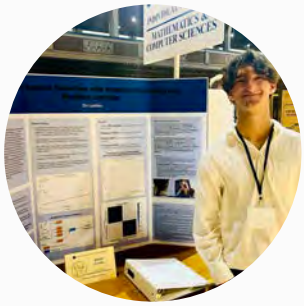
RISING STARS AND SYMPOSIUM SNAPSHOTS

CONGRATULATIONS TO OUR LOS ANGELES COUNTY SCIENCE AND ENGINEERING FAIR WINNERS

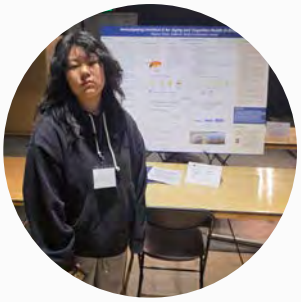
Every year, the BRI sponsors neuroscience awards at both the Los Angeles County and California State Science Fairs. At the County Fair this Winter season, **four winners—two from the Junior Division and two from the Senior Division**—were selected by UCLA judges and announced during the awards ceremony. Each winner received a certificate and cash prize in recognition of their outstanding achievement in neuroscience.

LAWRENCE ZHAO
First Place, Senior Division

ELLIOTT GOLDMAN
Second Place Junior Division:
School: Hale Charter Academy STEM Middle School.
Most likely will attend Taft High School.



ZIV LANDAU
Second Place, Senior Division
School: Calabasas High School



REGINA CHAE
First Place, Junior Division
School: Le Lycée Français de Los Angeles

2025 CENTER FOR NEUROTECHNOLOGY SYMPOSIUM

The BRI was proud to host the 2025 Center for Neurotechnology (CENT) Symposium, featuring nine distinguished speakers and session chairs across three themed sessions: Neural Dynamics & Computational Modeling, Technology, and Disease States & Clinical Applications. Highlights included presentations on AI-based neurotechnologies, brain-machine interfaces, neuromodulation, and cutting-edge imaging techniques.

"The CENT symposium was a wonderful opportunity to meet and interact with colleagues from different departments and discuss the latest and greatest in neurotechnology. It is, for me, one of the highlights of the TNT program."

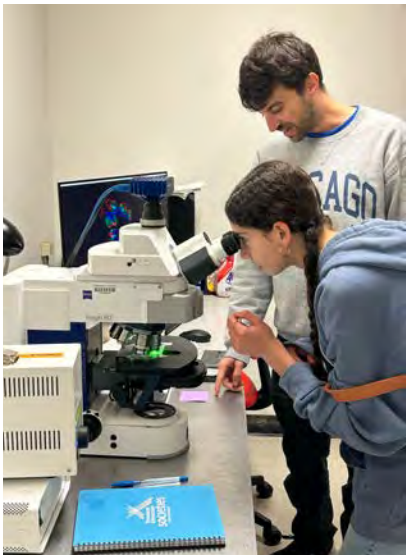
– NORMAN M. SPIVAK
Medical Student

The symposium concluded with the TNT Trainee DataBlitz, where trainees delivered rapid-fire research talks. **Congratulations to this year's winner, Fleming Peck,** for her presentation on *Context-Dependent Statistical Learning: Bridging Human Cognition and Neural Network Dynamics*.

"The 2025 CENT Symposium showcased breakthroughs in neural computation, AI, bioelectronic devices, and neuromodulation—offering a platform for community learning and cross-campus collaboration."

– ALICE HSU
Postdoctoral Research Scholar

COMMUNITY ENGAGEMENT



"BAW was an incredible opportunity to share the excitement of neuroscience—seeing the students' enthusiasm and gratitude filled me with immense joy and purpose."

- Priyanka Sigar
Ph.D. Student
NSIDP

UCLA graduate students and postdocs guide students through interactive neuroscience activities and behind-the-scenes lab tours.

Brain Awareness Week 2025: 5 Days, 7 Schools, 300+ Students, 50+ Volunteers, & a Whole Lot of Neuroscience!

For the 16th year, the BRI proudly hosted Brain Awareness Week (BAW), an immersive science outreach event that took place from March 10-14, 2025. Over 300 students from seven local elementary, middle, and high schools came to campus to experience the wonders of neuroscience firsthand. Led by Priyanka Sigar, NSIDP graduate student, and Vidya Saravanapandian, postdoctoral researcher, students explored brain structure, function, injury, ways to protect the brain, and more.

UCLA student and faculty volunteers guided these young visitors, making complex concepts easy to grasp and fun to explore. Students got to examine brain specimens and learn how the brain controls everything from our senses to our dreams, and were fascinated.

As the day unfolded, students toured UCLA research labs, exploring sleep, memory, and neurodevelopmental disorders. They observed neurons under a microscope, examined rat brain sections, and even wore EEG caps to see their brain activity in real-time. They also investigated how neurons communicate and studied cooperative behaviors in rodents. Their curiosity was boundless, asking questions like, "How early can I join college? This seems like a great place to be in." Their enthusiam for learning was inspiring.

UCLA undergraduate neuroscience students and faculty pictured with visiting students.

thank you to the teachers and chaperones who made this day of discovery possible for their students!

This year's BAW was a true community effort, with around 50 dedicated volunteers—including faculty, undergraduate and graduate students, postdocs, and staff—coming together to create an unforgettable experience for young learners. This event was made possible through the support of UCLA BRI, along with generous funding from UCLA SOLE, the International Brain Research Organization (IBRO), and the Dana Foundation. We also extend a special thanks to Joe Quintero, Aaron Michner, Patricia Lowe, Jenny Lee, and Priyanka Samra for their invaluable help in organizing this event, and all our BAW volunteers who offered their time to come engage with the kids.

By making neuroscience accessible and engaging, we are helping to shape the next generation of scientists and critical thinkers.

As we wrap up another incredible year of BAW, we look forward to continuing this tradition and expanding its reach in the years to come.

"Hearing a student say, 'I want to be a scientist when I grow up' was a powerful reminder of why community engagement matters."

- Vidya Saravanapandian

Postdoctoral Researcher, BRI

Exploring brain activity up close—students learn about brain disorders while wearing an EEG net.

Thank you to everyone who made this possible—we can't wait to do it again next year! If you're interested in volunteering for future Brain Awareness Week events, reach out to us at ucla.baw@gmail.com.

The UCLA-CDU Dana Center: Building Community-Rooted Neuroscience

Photo: UCLA-CDU seed grant collaborators with community partners at Normandie Church of Christ. Pictured left to right: Dr. Stanley Talbert, Dr. Kacie Deters, Dr. Jennifer Adrissi, Dr. Courtney Thomas Tobin, Bonnie Tann, and Mervin McChurchin.

At the UCLA-CDU Dana Center for Neuroscience and Society, science is being reimagined through authentic partnerships with the South Los Angeles community. By awarding annual seed grants, the Center empowers UCLA researchers to co-design neuroscience projects that reflect local needs and insights.

This year, Dr. Kacie Deters (Integrative Biology & Physiology) is teaming up with local health advocates to increase understanding of dementia and cognitive aging. Their collaboration will culminate in a pilot Brain Health Fair this June—bringing resources and conversations about brain wellness directly to the community.

"The goal of this grant is for us to start working together, to figure out the best way to engage with the community,"

- Dr. Kacie Deters

Dr. Valerie Tornini (Integrative Biology & Physiology; Society & Genetics) is investigating how environmental stressors like heat and noise influence brain development using zebrafish as a model. Working closely with community scholar Joanne Suarez, she's translating her findings into accessible and practical tools for South L.A. families.

Dr. Kacie Deters at Normandie Church of Christ

Meanwhile, Dr. Stephanie White (Integrative Biology & Physiology) and Dr. Sung-Jae Lee (Psychiatry) are planting the seeds of healing and research—literally. Their project to create a hummingbird garden on UCLA's campus is both a sanctuary and a site for studying how exposure to nature impacts neurological health. Future plans aim to expand this work into community spaces across South L.A.

"The Dana Center is already changing how I think about the impact of what I'm doing."

- Dr. Stephanie White

Faculty, staff, and students from UCLA and USC pictured with all the Brain Bee 2025 contestants.

On February 22, 2025, the annual Los Angeles Brain Bee took place at UCLA, co-hosted by the UCLA BRI and USC Zilkha Neurogenetic Institute. Led by the UCLA InterAxon undergraduate student group, this exciting event brought together high school students from 47 schools across SoCal, eager to test their neuroscience knowledge.

Los Angeles Brain Bee 2025: A Battle of Young Neuroscientists!

The competition kicked off with a written neuroscience quiz, followed by a Jeopardy-style neuroscience game for top-scoring students. Beyond the competition, the day was packed with interactive learning opportunities, where UCLA and USC teams led hands-on activities exploring traumatic brain injury, neurodevelopment, cerebrospinal fluid, careers in neuroscience, brain dissections, gerontology, and language development.

High school students explore the brain through interactive, hands-on demonstrations.

Students competing in a neuroscience-themed Jeopardy challenge.

Adding to the excitement, Dr. Ausaf Bari captivated the audience with his talk, "How Brain Surgeons Make Bionic Brains," while Dr. Gina Poe had students singing and dancing as they learned about the power of sleep in "Sleep to Learn." A career panel featuring undergraduates, graduate and medical students, and faculty from UCLA and USC gave attendees valuable insight into different paths in neuroscience.

The day concluded with an award ceremony, where the first-place winner, Ameya Balaji from Notre Dame Academy High School was honored. As part of her prize, the USC Zilkha Neurogenetic Institute will sponsor her trip to the 2025 USA Brain Bee Championship, held at Rutgers University Robert Wood Johnson Medical School in New Jersey on May 3-4, 2025.

With an inspiring mix of competition, discovery, and mentorship, this year's Brain Bee was a celebration of neuroscience and the bright young minds shaping its future!

"The Brain Bee wasn't just a competition—it was an incredible learning experience!"

Ameya Balaji, Winner of the 2025 Los Angeles Brain Bee

Ameya's journey, study strategies, and inspirations at Brain Bee

What inspired you to participate in the LA Brain Bee?

"I first came across the LA Brain Bee on the Brain Research Institute's website! Reading the first chapter of Brain Facts astounded and inspired me, learning how different parts of the brain work together for even the simplest actions."

What was your favorite part of the event?

"The Jeopardy-style game! It was a really fun way to test our neuroscience knowledge while balancing risk and reward."

How did you prepare for the competition? Any study tips for future participants?

"I started with the resources on the Brain Bee website—Brain Facts and Neuroscience: Science of the Brain—and used active recall to review key concepts. My top study tip: take your time connecting the dots between concepts for a deeper understanding!"

What was it like competing at UCLA? Any favorite moments from the event?

"I had an amazing time at UCLA—not just competing, but also learning from guest speakers and exploring hands-on demonstrations by UCLA and USC. The brain dissection and neuroscience career panels were especially eye-opening!"

Bringing Brain Education to Families Affected by the LA Wildfires

During the devastating Los Angeles wildfires, families across the region faced immense challenges, seeking refuge and support at shelters. While the Santa Monica College (SMC) focused on food and clothing donations for affected families, a team of neuroscientists saw an opportunity to partner with SMC and bring brain education to families and children temporarily away from school.

Mario Tama/Getty Images

UCLA team sharing brain science with families affected by the fires.

Led by Dr. Elena Dominguez and Dr. Vidya Saravanapandian from the UCLA BRI, along with undergraduates from Project Brainstorm, Leo Chang and Gabriela Maldonado, the team partnered with SMC to set up engaging activity stations at the disaster relief center. Children explored brain structure, function, and the science of learning in a welcoming space, offering both education and a sense of normalcy amid uncertainty.

Parents deeply appreciated the effort, with one parent sharing:

> *"Thank you for doing this. We are processing a lot and will be for a long time to recover from this. We appreciate that you are doing this because education must go on—no matter what."*

This experience was a powerful reminder of the impact of science outreach in times of crisis. Even in hardship, learning fosters hope, curiosity, and resilience—and the neuroscience community is honored to play a role in supporting families through education.

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SUPPORT THE UCLA BRI IN ADVANCING NEUROSCIENCE

Your support drives transformative discoveries, nurtures emerging talent, and enhances community engagement across more than 300 UCLA labs in 32 departments. Every contribution accelerates groundbreaking brain research. Explore how you, your company, or your foundation can be part of this exciting journey!

The UCLA Brain Research Institute Fund is designed to build a pipeline of future neuroscientists while demystifying brain science for the community at large. It supports impactful educational programs and community initiatives, such as:

1. **Brain Bee**: Sponsor a high school competition that challenges 80 students and funds travel for winners to the U.S. National Championship.
2. **Brain Awareness Week**: Fund interactive outreach to K-12 schools, engaging dozens of Greater Los Angeles students per day over the course of a school week.
3. **Cell Scholars Program**: Enable high school students to participate in year-long, hands-on neuroscience research with stipends.
4. **Neuroscience Day**: Support an annual gathering of 600 neuroscientists featuring public panels and interactive sessions.
5. **NeuroNarratives Dinners:** Host intimate dinners inspired by UCLA's 'Dinner with 12 Strangers,' fostering innovation, community, and engaging neuroscience conversations between BRI faculty and your network.

The **BRI's Greatest Needs Fund**: Offers flexible, unrestricted funding which empowers the BRI to seize emerging research opportunities, provide emergency grants, upgrade essential lab equipment, and expand outreach initiatives.

The BRI Travel Awards: Enable trainees to attend key conferences, fostering innovation, critical feedback, and research collaborations vital for neuroscience advancement.

Your generosity—whether through direct donations, corporate sponsorships, foundation partnerships, or hosting NeuroNarratives Dinners—accelerates groundbreaking research, inspires future neuroscientists, and deepens our community engagement. To discuss giving opportunities, please contact ***Qjaquice Brantley,*** *Director of Development, at* qbrantley@mednet.ucla.edu. Every contribution helps unlock the mysteries of the brain. Thank you for your commitment to the BRI!

Speaking of mysteries, here are some fascinating brain facts to inspire your curiosity!

The human brain processes images in as little as 13 milliseconds—faster than blinking!

Your brain produces about half a liter of cerebrospinal fluid every single day!

Your brain generates enough electricity (~20 watts) to power a small lightbulb!

Memories aren't stored in just one place; they're distributed across multiple regions, recreated every time you recall them.

ADDITIONAL BRI RESOURCES & WAYS TO GET INVOLVED!

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The Man Who Thinks He Can

By Walter D. Wintle

If you think you are beaten, you are
If you think you dare not, you don't,
If you like to win, but you think you can't
It is almost certain you won't.
If you think you'll lose, you're lost
For out of the world we find,
Success begins with a fellow's will
It's all in the state of mind.
If you think you are outclassed, you are
You've got to think high to rise,
You've got to be sure of yourself before
You can ever win a prize.
Life's battles don't always go
To the stronger or faster man,
But soon or late the man who wins
Is the man who thinks he can.