

Winter 2023

Dear Colleagues and Friends,

We are fortunate to have an extraordinary community at the CNLM and in this edition I would like to celebrate some of the people, and the research, that makes UCI one of the leading institutions in learning and memory.

As many of you know, UCI was the birth place of neuroscience as a formal discipline with the establishment of the first department devoted to the study of brain and behavior in 1964. Now, more than half a century later, we continue to be at the forefront of this incredible endeavor. Last November, CNLM Fellow Prof. Oswald Steward began serving as the Society for Neuroscience's President. He is the fourth UCI faculty member to hold this prestigious post.

In other great news, the CNLM celebrates is 40th anniversary this year, which is a remarkable feat and a testament to the strength of the learning and memory community at UCI. We will celebrate the 40th anniversary at the <u>International Conference on Learning and Memory</u> in Huntington Beach this April with over 1,000 of our closest friends and colleagues. More on this

celebration coming soon. If you have not yet registered for the conference, please <u>register</u> <u>here.</u>

As we usher in the spring, we are excited to announce our 2023 CNLM Awards and will look forward to celebrating the accomplishments of our CNLM community.

- Research Updates
- News and Highlights
- <u>Awards and Honors</u>
- We're Social!

Sincerely,

yidal Ym

Michael A. Yassa Ph.D. Professor and James L. McGaugh Endowed Chair Director, Center for the Neurobiology of Learning and Memory

# **Research Updates**



Study finds how our brains turn into smarter disease fighters

Combating Alzheimer's and other neurodegenerative diseases by inserting healthy new immune cells into the brain has taken a leap toward reality. Neuroscientists at the University of California, Irvine and

the University of Pennsylvania have found a way to safely thwart the brain's resistance to them, vaulting a key hurdle in the quest.

**Read More** 



Early-life stress can disrupt maturation of brain's reward circuits, promoting disorders

A new brain connection discovered by University of California, Irvine researchers can explain how earlylife stress and adversity trigger disrupted operation of the brain's reward circuit, offering a new therapeutic target for treating mental illness. Impaired function of this circuit is thought to underlie several major disorders, such as depression, substance abuse and excessive risk-taking.

### **Read More**



#### UCI researchers discover crucial role of brain's striatum cilia in time perception

Researchers at the University of California, Irvine have discovered that removal of cilia from the brain's striatum region impaired time perception and judgment, revealing possible new therapeutic targets for mental and neurological conditions including schizophrenia, Parkinson's and Huntington's diseases, autism spectrum disorder, and Tourette syndrome.

### **Read More**





UC Irvine-led study links metabolism changes in certain brain cells to Huntington's disease

A research team led by the University of California, Irvine has linked the mutation that causes Huntington's disease to developmental deficits in the brain's oligodendrocyte cells that are caused by changes in metabolism. They found that high doses of thiamine and biotin can restore normal processes.







The adult brain has the potential to partially recover from inherited blindness, study finds, featuring CNLM Fellow Sunil Gandhi

A discovery about how some visually impaired adults could start to see offers a new vision of the brain's possibilities. The finding that the adult brain has the potential to partially recover from inherited blindness comes from a collaboration between researchers in the University of California, Irvine School of Biological Sciences and the School of Medicine.

#### **Read More**



<u>UCI study IDs what brings our senses and thoughts together, featuring CNLM Fellow Gyorgy</u> <u>Lur</u>

Our ability to think, decide, remember recent events and more, comes from our brain's neocortex. Now University of California, Irvine neuroscientists have discovered key aspects of the mechanisms behind these functions. Their findings could ultimately help improve treatments for certain neuropsychiatric disorders and brain injuries.

# **News and Highlights**



Join us at the 2023 International Conference on Learning and Memory LEARNMEM2023

Feb 27, 2023



Tagging Early Trauma

Feb. 26, 2023

THE 2022 CNLM ANNUAL

Browse the 2022 CNLM Annual Report





Untreated Sleep Apnea May Increase

Dementia Risk

Nov 16, 2022



UCI's Oswald Steward to serve as president of

Society for Neuroscience

Nov 15, 2022



Exploring The Consequences Of Early Life

Adversity On The Brain

Nov 9, 2022



3 Unique Ways We Can Remember The Past

Nov 8, 2022



How to Improve Your Memory (and Stop

Losing Your Keys)

Nov 3, 2022



The #1 Thing You Can Do to Lower Your

**Dementia Risk** 

Nov 1, 2022



UCI Brain Camp taps into the teenage brain

Oct 24, 2022



Spotlights on Schneiderman Fellows

Oct 14, 2022



#### Welcome to the New CNLM Fellows

Oct 7, 2022

### **Awards and Honors**



CNLM Fellow Dr. Kei Igarahi has been selected to receive the 19th Japan Academy Medal, which is the highest honor of the Japan Academy for researchers under the age of 45.



CNLM Fellow Dr. Lulu Chen has been selected to receive the 2022 UCI Emerging Innovation/Early Career Innovator of the Year Award at Beall Applied Innovation Center.

Congratulations



CNLM Fellows Georg Streidter and Gregory

Hickok were recognized for their achievements in science and society by the American Association for the Advancement of Science.

# We're Social!



### Featured Tweet

