

Dennis McGinty Obituary



The recent death of **Dennis McGinty** is a great loss to his family and friends and to the field of basic sleep research.

Dennis did his undergraduate training at the Massachusetts Institute of Technology, earning two bachelor's degrees in 1959 and '60. He received his PhD from the University of Pennsylvania in 1967, working with **Phillip Teitelbaum**, an expert in hypothalamic mechanisms controlling feeding. With Teitelbaum, Dennis studied the role of oral sensations in eating disturbances caused by damage to the hypothalamus.

Dennis then moved to Los Angeles for a 1-year postdoc with **Carmen Clemente** at the Sepulveda VA Medical Center before he was hired as a Research Psychologist there and in 1972 was appointed as Chief of Neurophysiology Research. That same year Dennis joined the Sleep Research Society where he was a member for 53 years, serving on the Executive Committee (1996-2000), the Awards Committee (2002-5).

At UCLA and the VA Medical Center, Dennis worked with, among many others, **Barry Serman, Jerry Siegel, Peter Shiromani, Ron Szymusiak** and **Noor Alam**, applying his training and his considerable mentoring skills to an analysis of hypothalamic and brainstem mechanisms controlling sleep. Dennis led pioneering studies that focused on highlighting the importance of hypothalamic mechanisms in the regulation of sleep. Importantly, he discovered that sleep-active hypothalamic neurons are also sensitive to local brain temperature, suggesting a convergence of thermoregulatory and sleep regulatory functions. W-In addition, with his postdoctoral trainee **Ruben Guzman-Marin**, Dennis provided some of the earliest evidence that sleep fragmentation disrupts neurogenesis in the adult hippocampus.

In 1975 Dennis joined the Society for Neuroscience and was a member there for 50 years. In 1988 and for 30 years Dr. McGinty singlehandedly taught the Neuropsychology of Sleep course for undergraduates at UCLA in the Department of Psychology. He also joined the UCLA Brain Research Institute in 1988 and was a member for 37 years. Dennis served on the Editorial Board of the Journal Sleep (1997-2000 and 2000-2019) and impressed his trainees by reading at least one new journal article every single day, making him one of the most knowledgeable and well-read sleep scientists in the world.

Dennis studied the activity of brainstem neurons controlling nonREM and REM sleep and movement. With **Jerry Siegel** and **Marc Breedlove**, Dennis helped identify the brain regions responsible for REM sleep, extending studies by the French researcher Michel Jouvet.

Together with **Ron Harper**, Dennis developed a technique for recording the activity of brain neurons in freely moving animals using fine microwires, 32 microns in diameter. Prior to the development and perfection of this and related techniques, the activity and function of neurons could only be inferred by studies in anesthetized animals or by the symptoms of damage to particular brain regions, such as occur

after strokes. This fine wire neural recording technique provided a foundation for our understanding of the brain and its workings.

Dennis was the first to record the activity of brain neurons containing serotonin, finding that they were silent during REM sleep. His UCLA graduate student, **Barry Jacobs**, used this technique in definitive studies of the activity of the neurons containing serotonin when Barry became a professor at Princeton University. These neurons are now understood to not only modulate sleep but to play an important role in human mental health. Analysis of the activity of brainstem neurons relative to behavior revealed details of the location and activity of neurons related to specific movements. This technique was also used to reveal the second-to-second activity of neurons containing norepinephrine, which surprisingly also fall silent in REM sleep, like serotonin neurons.

In short, Dennis pioneered basic studies opening vast areas of research that continue to advance our understanding of sleep and waking.



Over the course of his career, he mentored and nurtured a generation of researchers who have gone on to become leaders in the field. He was postdoctoral advisor to 20 notable researchers, including (longstanding collaborations underlined)

Jerry Siegel, Ron Szymusiak, Peter Shiromani, Yoshiaki Iwamura, Michael Stevenson, Michael Littner, Rene Drucker-Colin, Beverly Krilowicz, Noor Alam, Joel Bennington, Mitsuyuki Nakao, Teresa Steininger, Cuzneat Demirozu, Uma Rao,

Hui Gong, Melvi Methiparra, Xinzheg Xi, Ruben Guzman-Marin, Natalie Suntsova, Fiona Baker, and Greg Hammond. He was the Dissertation Advisor of **Barry Jacobs, Marc Breedlove, Stephen Morairty, Timothy Hays, Polly Moore, and Noemie Sportiche** and served on the dissertation committees of **Sarah Wurts, J.Ott, and L.Boehmer**. His legacy lives on through their continued contributions. In addition to grants supporting his research that he earned through the VA and the NIH, Dennis served as a Principal Investigator on an NIH training grant in Basic Sleep Research maintained at UCLA for 20 years training 8 grad students and postdocs across the country and introducing hundreds more to the sleep research family. His accomplishments were recognized by his peers when he received the Sleep Research Society's Distinguished Scientist Award in 1994.



Beyond his scientific achievements, he was highly respected and admired for his warmth, generosity, and humanity.

Dennis was not only a great researcher, but a truly exceptional human being. Dennis was an informal mentor and inspiration to dozens of young scientists including Doug Nitz, Martha Rosenthal, and Gina Poe. **If your life was benefitted by Dennis, please consider contributing to this community page to leave your story here:**

Dennis inspired me at the first Arrowhead Basic Sleep Workshop in 1988, when working as a Postbac in Barry Sterman's lab. His session on Critical Unanswered Questions was fresh and honest about what we did *not* know about sleep, what hypotheses he had thought up and tested and ideas that failed -all made the field seem accessible to any thinking person who wanted to give it a try. His warmth of personality also created a sense of a family, one I wanted to join. I was originally headed in a different career direction. Dennis was a large part of what derailed me from that plan. He also helped put me on the sleep wagon. He wrote a truly beautiful letter of recommendation for my application to grad school: sheer elegance. I got to see it a few years later because an admin thought I would be encouraged. She was right. His words on that confidential letter have come back to me many times to help get me through the occasional bump in the road and greet every day with more confidence. Finally, his practice of reading a research paper every night has helped me see reading papers as something one does for curiosity rather than just work, and as a joy in addition to a worthy discipline. - **Gina Poe, UCLA**

In Memory of Dr. Dennis McGinty: By Peter Shiromani, Ph.D, Emeritus Professor, MUSC

Dr. Dennis McGinty had a profound and lasting impact on my life. He offered me my first research position without ever having met me, placing complete trust in my curiosity and allowing me to explore any topic I wished within the neuroscience of sleep. That kind of trust is rare, and it shaped not only my career but my understanding of mentorship.

But the most important lesson I learned from Dr. McGinty had nothing to do with science.

He believed deeply in spending time with family, in the importance of exploring the world beyond work, and in treating others with kindness and respect. He completely rejected the idea of the endless workweek with people tethered to the workbench. He believed that the joy of life drove creativity and insight. He valued work-life balance before it was fashionable.

I'll always remember the day he found me working on a weekend, just days after my daughter was born. He gently told me, "Go home. Take the time to bond with your child. Work will still be here, but the chance to be with family in these moments won't come again."

That moment was a gift, and a lesson I've carried ever since: to live fully, love deeply, and never lose sight of what truly matters.

Dr. McGinty's legacy lives on not only in the science he advanced, but in the lives he touched.

In memory of Dennis McGinty: By Douglas Nitz, PhD, Professor - UCSD Dept. of Cognitive Science

Dennis was an inspiration to me. He took me seriously at a time when no one had any real reason to do so and gave me confidence and standing. The Sepulveda VA building-60 sleep research crew and culture was an amazing experience for me - so much happened scientifically in that era and we all shared some of LA's wilder events (e.g., the '94 earthquake was basically centered on our laboratories). Though not my PhD advisor, he took time, anytime I wanted it, to talk science with me. I do my best to emulate that with the students I encounter. He knew it all as regards sleep and so I saw first-hand what it meant to know the literature. Back then, some articles were in french (Compte Rendues) or italies (archives de biologie) and folks would occasionally be trying to parse what was written by Jouvet or Parmeggiani. That example put me on track to have better conversations with the leaders of the field than I ever might have. I sometimes refer to it as my secret weapon. He could be skeptical and critical without ever being mean or small about it. He was always excited to talk science and talking science with him made it seem like we were doing the most important thing in the world. I haven't seen him in many years, but I seriously doubt he ever lost that edge. When I went off to post-doctoral work, he spent time checking out the people I was to work with and had the strength to clue me into some downsides - because he cared. I went anyway and, as it turns out, he was right - though it all worked out for me. It's hard to put down in words how important it was to have someone like him in my camp - again, for no particular reason - mainly because he loved science and was a good dude. I wish I had had a chance to see him these last years. Thank you, Dennis - rest in peace - mission accomplished.

In remembrance of Dennis McGinty by Stephen Morairty, PhD, VP of Translational Neuroscience, Psychogenics.

I first met Dennis at an APSS meeting in San Diego when I was an undergraduate. I was there with Ralph Berger to present a poster on my undergraduate thesis. I attended a talk Dennis gave and I was immediately drawn to him. Although I had performed a sleep-related study for my undergraduate senior thesis, I had not yet decided if I was going to grad school, let alone that I wanted to study sleep. After speaking with Dennis, I decided to both go to grad school and study sleep, in his lab at UCLA! He had a warm, welcoming smile and was kind and accessible. He spoke in a calm and clear manner while his words were full of knowledge and insights. Dennis instilled a sense of wonder and excitement about science without hype or being overly emotional. In the lab, he was either reading a paper or tinkering in the workshop. He never stopped thinking about new ways to test his hypotheses and continued working on experimental methods throughout his career. I thank Dennis for feeding my curiosity, supporting my scientific development, and for guiding me to always perform my experiments with the highest scientific rigor possible. Our field has lost one of its Godfathers, and he will be missed. Thank you, Dennis, for all your many, many contributions to science and humanity.