

Alumni Stories

Featured Alum: George R. "Ron" Mangun, 1976-80, General Studies

From Outreach Director Barbara Claybaugh: I would like to share with you the profile of George R. "Ron" Mangun, Ph.D. I must say his vita is most impressive. His field is so fascinating and one that is changing at an ever accelerating pace.

Years Attended: 1976-80

Area of Study: General Studies Email: magnun@ucdavis.edu



Ron is currently UC Davis Dean of Social Sciences in Davis, California, as well as Professor of Psychology and Neurology. (see <u>Faculty page</u>) He received his A.A. degree from Yavapai College in 1981, his B.S. in Chemistry from NAU in 1981, and his Ph.D. in 1987 from the University of California, San Diego.

In 1990 he joined Dartmouth Medical School as an Assistant Professor in the Program in Cognitive Neuroscience. In 1992, he moved to the Psychology Department at UC Davis as one of the founding faculty

members of the Center for Neuroscience. He taught sensation, perception and cognitive neuroscience, developing new courses at the undergraduate and graduate levels, and serving as head of the Perception and Cognition Area of the Psychology Department.

After founding the interdisciplinary Center for Cognitive Neuroscience at Duke University he was recruited back to UC Davis in 2002 to develop the Center for Mind and Brain. The Center is a UC Davis research initiative bringing together world-class scientists with the latest technology to learn how the human mind works and to teach the techniques and tools to the next generation of researchers.

The core areas of research seek answers to such questions as - How do our brains integrate input from our various senses? Why does music have the power to

evoke such strong sense memory? These are the questions they explore in their studies of audio-visual integration and music. Their memory research explores how infants, children, young adults, and older adults store information in memory, maintain that information over time, and retrieve it when needed. The goal is to understand how the brain's memory systems work in healthy individuals, how these systems develop and decline over the lifespan, and how they fail in people with memory disorders.

Some of the current research applications include: effects of meditation on the brain, interplay between music and memory, how children with autism and Fragile X process information, development of morality in children, neurobiology of sign languages, what optical illusions say about vision, and effects of aging on the brain, including Alzheimer's. Check out their web site for more fascinating information: http://mindbrain.ucdavis.edu.

You can see why Ron is a popular speaker at national and international venues. In 1992, he chaired the founding committee of the international Cognitive Neuroscience Society, and has been an ex officio member of the society's Governing Board since that time.

The old professorial adage holds true for Ron ("publish or perish") and he has published more than 110 scientific papers, chapters, books, edited volumes and special journal issues, including his celebrated co-authored undergraduate textbook dedicated to the cognitive neurosciences, Cognitive Neuroscience: The Biology of the Mind. His laboratory in the Center for Mind and Brain continues research on brain attention mechanisms in healthy patient populations and is funded by the National Institute of Mental Health and the National Science Foundation.

Ron recalls his experiences in many outstanding courses at Yavapai fondly and with gratitude. One experience in particular that stands out was his error in the organic chemistry lab where he rashly overheated a synthesis involving various acids. The flask containing the materials violently exploded covering him from the waist down in sulfuric acid and hydrochloric. His instructor and another student help to strip him, wash him and neutralize the acids. Luckily, he was working in a modern lab using an enclosed fume hood with the protective glass shield pull down, which protected his upper body and face from the corrosive materials. Later when he transferred to NAU, he was shocked to see that in the crowed lab, students performed the same chemical reaction out on the bench top, without the protection of the fume hood that saved him and others from serious injury. His appreciation for the facilities at Yavapai College soared.

Mangun describes three wonderful mentors in science at Yavapai College. Professors Rod Barkhurst (chemistry), Archie Dickie (Biology) and Dale Williams (Biology). He says they were as good as it gets, and he still thinks often of how they helped him launch his career.