Faculty Profile

At Trestles Beach, a chaparral-covered surfer’s haven just south of San Clemente, California, the locals call John Walsh, Ph.D., “the surfing professor.”

“When people get hooked on surfing they get hooked for life,” he said. “It’s no different than any other addiction because you’re tapping into the same brain system.”

Dr. Walsh, a neuroscientist and associate professor of gerontology at the USC Davis School, also knows a thing or two about how the mind works. His other passion – one that involves beakers rather than breakers – is brain connectivity and body movement, where he focuses on how to improve the quality of life for people who suffer from motion-restricting conditions such as stroke and Parkinson’s disease.

Dr. Walsh’s lab conducts studies on aging, calcium, and free radical physiology as they relate to changes in synaptic plasticity and cell behavior. He examines brain slices of lab mammals such as rats and mice for changes in synaptic activity crucial to normal movement, as well as changes that happen as a result of aging and disease.

John Walsh, Ph.D.
Associate Professor of Gerontology