



Dr. Michael M. Merzenich is Professor Emeritus at UCSF, where he ran a government-funded research lab, and is also Chairman and Chief Scientific Officer of Posit Science Corporation, which develops and distributes plasticity-based brain training programs and assessments. He is widely known in the world of neuroscience for his breakthrough research in brain plasticity and his translational research with respect to applied plasticity.

As a result of his seminal brain-mapping experiments thirty years ago, Dr. Merzenich overturned the conventional wisdom that plasticity ends in adolescence and showed that the adult brain remains plastic (or malleable) at any age. He then applied principles of plasticity as a co-inventor of the cochlear implant, an invention that has restored hearing to more than 300,000 people with deafness. His key insight was that the artificial cochlear could work with just 8 connection points to the brain (rather than the 3,000 of the natural cochlear) and that the brain's plasticity would be able to fill in the information to make the implant effective. In 2015, he was a co-recipient of the Russ Prize from the National Academy of Engineering, the highest honor in Bio-Engineering, for this invention.

In 1995, Dr. Merzenich took a sabbatical from UCSF to co-found Scientific Learning Corporation (NASDAQ: SCIL), a company that has helped millions of school children with language learning and reading, through exercises based on brain plasticity. Dr. Merzenich was the company's first CEO and served for many years as its Chief Scientific Officer.

In 2003, Dr. Merzenich co-founded Posit Science Corporation to distribute brain training programs and assessments (shown effective in university laboratories around the world) to improve performance. Today, more than 130 peer-reviewed articles show a wide range of significant benefits from using these exercises and assessments, including gains in standard measures of cognitive performance (eg, speed of processing, attention, memory, executive function), in standard measures of quality of life (eg, health outcomes, health-related quality of life, mood, depressive symptoms, feelings of control) and in standard measures of real world performance (eg, functional independence, driving, balance, gait).

For his body of work, Dr. Merzenich is among a small number of scientists elected by his peers to two of the three national academies in the United States. He is a member of both the National Academy of Sciences and the Institute of Medicine. He is a recipient of many honors and awards, including the Award for Distinguished Scientific Contributions of the American Psychological Association, the International Ipsen Prize, the Zulch Prize of the Max-Plancke Institute, the Thomas Alva Edison Patent Award, the Purkinje Medal and the Karl Spencer Lashley Award. In June, Dr. Merzenich was designated a Kavli Laureate (perhaps the highest award in neuroscience), and he will receive this honor from the King of Norway in the venue of Nobel peace prize winners, in September.

Dr. Merzenich is an inventor on nearly 100 patents, and has received scores of government grants. He is an author on hundreds of peer-reviewed journal articles and the author or editor of several books, including one for lay readers entitled, *Soft-Wired: How the New Science of Brain Plasticity Can Change Your Life*.

He has been featured in the CBC program, *The Nature of Things*, along with Dr. Norman Doidge, the author of *The Brain That Changes Itself*, *The Agenda* with Steve Paikin, in a series of documentaries on plasticity on PBS and in the award-winning Australian Broadcasting mini-series "Redesign

My Brain” (shown on The Agenda in Canada and Science Channel in the US as “Hack My Brain”).