

# Brain Training

**New research on the human brain is challenging some long-held beliefs that deal with how we think, learn and lead. So prepare to teach your old dogs some new tricks, with the help of neuroscience.**

BY MICHAEL O'BRIEN

**W**ith all the fancy computers and other expensive equipment currently being used by white-coated researchers to unlock the full potential of the human brain, perhaps it's surprising that something as low-tech as an FM radio can be an effective tool to improve the way a brain, and its owner, can work together.

The idea that a radio can be used to improve brain activity (read on to see just how) is part of "the biggest discovery" in the field of brain research in the last 20 years, according to Louis Csoka, president and founder of Apex Performance, a Charlotte, N.C.-based leadership-development firm. The discovery, he says, involves the concept of neuroplasticity, pioneered by scientists including Paul Bach-y-Rita and Michael Merzenich, which states that experience actually changes the structure of the brain.

"In other words, if you literally repeat certain things, thoughts or behaviors, neuro-connections are made and repeatedly strengthened so that you've restructured the element of the brain that deals with that kind of behavior or thought," Csoka says.

"Previously, we thought that everything was fixed from the moment of birth and that, basically, your brain would be unchanged," he says, "and, in fact, that's one of the reasons we

used to think that getting older [meant] you automatically [suffered from] dementia and senility. We now know that's not true at all."

The Palo Alto, Calif.-based Institute for the Future recently wrote in a white paper that soon, hiring practices, training and management "will draw from a deeper understanding of neuroscience and complex behavioral algorithms. Already, start-ups have emerged that promise to train individuals to increase their mental acuity, focus and efficiency based on brain science. As science comes to work, human resource managers will need to become versed in these new disciplines. While most HR practitioners will likely not be scientists, they will need to be able to understand the language of these disciplines and collaborate with scientists in order to assess and implement some of the new tools."

