

# John garcia

Science



John Garcia (born June 12, 1917) is an American psychologist, most known for his research on taste aversion learning. Garcia studied at the University of California-Berkeley, where he received his A. B. , M. A. , and Ph. D. degrees in 1955 at the age of 38.

He was appointed Professor Emeritus at Los Angeles' University of California, though he at other points has also been an Assistant Professor at California State College, a Lecturer in the Department of Surgery at Harvard Medical School, Professor and Chairman of the Psychology Department at the State University of New York at Stony Brook, and Professor of Psychology at the University of Utah. Garcia lived with his parents on their farm. By age 20, he was working as a mechanic making 18-wheeler trucks. A few years later he solved the problem of installing mufflers onto submarines and consequently became a ship fitter. citation needed] During World War II, he joined the United States Army Air Corps and became a pilot; after persistent nausea, he could no longer fly and he finished his term as an intelligence specialist. When demobilized, he used the G. I. Bill to pay for his college tuition. He attended Santa Rosa Junior College where he achieved a bachelor's degree. He then attended the University of California at Berkeley where he achieved a master's degree and Ph. D. Garcia's first postdoctoral job was with the U. S. Naval Radiological Defense Lab in San Francisco, California in 1955. citation needed] He began to study the reaction of the brain to ionizing radiation in a series of experiments on laboratory animals, mainly rats. Garcia noticed that rats avoided drinking water from plastic bottles when in radiation chambers. He suspected that the rats associated the “ plastic tasting” water with the sickness that radiation triggers. During the experiments rats were given one

taste, sight, sound as a neutral stimulus. Later the rats would be exposed to radiation or drugs (the unconditioned stimulus), which would make the rats sick.

Through these experiments, Garcia discovered that if a rat became nauseated after presented with a new taste, even if the illness occurred several hours later, the rat would avoid that taste. This contradicted the belief that, for conditioning to occur, the unconditioned response (in this case, sickness) must immediately follow the conditioned stimulus-to-be (the taste). Secondly, Garcia discovered that the rats developed aversions to tastes, but not to sights or sounds, disproving the previously held theory that any perceivable stimulus (light, sound, taste, etc. ) could become a conditioned stimulus for any unconditioned stimulus. citation needed] Garcia's discovery, conditioned taste aversion[1], is considered a survival mechanism because it allows an organism to recognize foods that have previously been determined to be poisonous, hopefully allowing said organism to avoid sickness. As a result of Garcia's work, conditioned taste aversion has been called the " Garcia Effect. " Throughout his work Garcia also achieved a number of awards such as the Howard Crosby Warren Medal and the APA Distinguished Scientific Contribution Award. He was elected to the National Academy of Sciences in 1983 and has over 130 publications.