

IN MEMORIUM

Frank Donald Drake (May 28, 1930 – September 2, 2022)

Frank Drake, FE'77 was a radio astronomer, best known by the scientific community for the Drake's Equation and by the rest of the world for his efforts to detect intelligent extraterrestrial life, transforming this search from fringe science to serious scientific exploration. Once computers became common desktop accessories, millions joined the Search for Extraterrestrial Intelligence (SETI) program by enabling their computers to do 'off-hours' searches. More recently, through the Kepler telescope and other efforts, scientists have found that many planets throughout the universe have habitable characteristics similar to those on Earth.

The Drake's Equation, devised in 1961, was created to stimulate scientific dialog surrounding the number of civilizations whose electromagnetic emissions could be detected. Drake derived the formula to present as part of the first meeting on the Topic of SETI. Drake's first of many efforts to use radio waves in his extraterrestrial life search was in 1960, at the National Radio Astronomy Observatory in West Virginia (Project Ozma) and his life-long association with the SETI began at the Arecibo Observatory In 1974.

Dr. Drake's career started as an engineering physicist and astronomer and served as an electronics officer for three years with the US Navy. Among his many accomplishments, Dr. Drake created the first interstellar message ever deliberately transmitted, helped design the plaques and golden records that were carried aboard Voyagers 1 and 2, served as the chief of NASA's Lunar and Planetary Sciences Section at the Jet Propulsion Lab, was the Cornell University Goldwin Smith Professor of Astronomy, director of the National Astronomy and Ionospheric Center, SETI director of the Carl Sagan Center for the Study of Life in the

Universe, and Dean of the Division of Natural Sciences at UC Santa Cruz. He was a member of the National Academy of Sciences, fellow of the American Academy of Arts and Sciences, president of the Astronomical Society of the Pacific, and was awarded the first Education Prize by the American Astronomical Society.

Dr. Drake began his career on the east coast and moved to California in the 1980s. We may be able to thank Dr. Jill Tarter, FN'98 for Frank's move to our chapter. Jill is a cofounder of SETI and one of Frank's long-term friends and colleagues and we'll close this memorial with her comment for Scientific American and agree that he will be missed. She wrote:

“ I think the first time I met Frank was at Arecibo in the late 70's. My husband, Jack Welch, was on the Scientific Advisory Committee and then the President's Advisory Committee for Arecibo; I tagged along on those trips to Puerto Rico and spent the meeting hours hanging out at the observatory getting to know the telescope. The first time I actually got to work with Frank was during John Billingham's 'Life in the Universe' Conference at Ames Research Center in 1979, though I'd been using the Drake Equation as a TA for years. After Tom Pierson and I co-founded the SETI Institute in 1984, we wanted Frank to leave Cornell and come be its President. I participated in a phone call that Barney Oliver made to Frank to twist his arm to make that happen; it was most memorable, and Amahl Drake acted as our secret weapon. Barney prevailed and Frank began his Northern California life at UC Santa Cruz and the SETI Institute – to everyone's benefit. He will be missed. (**Dr. Jill Tarter**, submitted to Scientific American)”