

Biographical Sketch
FRANK D. DRAKE

Education

1952	Cornell University	B.A., Engineering Physics (with honors)
1956	Harvard University	M.S., Astronomy
1958	Harvard University	Ph.D., Astronomy

Professional Employment

1952-1956	U.S. Navy, Electronics Officer
1956-1958	Agassiz Station Radio Astronomy Project, Harvard University
1958-1963	National Radio Astronomy Observatory, Green Bank, West Virginia - Head of Telescope Operations & Scientific Services Division - Conducted planetary research and cosmic radio source studies
1963-64	Jet Propulsion Laboratory, Chief of Lunar & Planetary Sciences
1964-1984	Cornell University - Associate Professor of Astronomy (1964); then Full Professor (1966) - Associate Director, Center for Radiophysics & Space Research (1964-75) - Director, Arecibo Observatory, Arecibo, Puerto Rico (1966-1968) - Chairman, Astronomy Department, Cornell University (1969-71) - Director, National Astronomy & Ionosphere Center, part of which is the Arecibo Observatory (from its creation in 1970 until July 1981) - Goldwin Smith Professor of Astronomy, Cornell University (1976-84)
1984-Present	University of California, Santa Cruz - Dean, Natural Sciences Division (1984-1988) - Acting Associate Vice Chancellor, University Advancement (1989-90) - Professor of Astronomy & Astrophysics (1984 – 1996) - Professor Emeritus of Astronomy & Astrophysics, (1996 –present)
1984-Present	SETI Institute, Mountain View, California: - President (1984-2000) - Chairman, Board of Trustees, (1984-2003) - Chairman Emeritus, Board of Trustees, 2003- present - Director, Carl Sagan Center for the Study of Life in the Universe, 2004-present

Professional Achievements

1959	Shared in the discovery of the radiation belts of Jupiter, and conducted early pulsar observational studies
1960	Conducted Project OZMA at NRAO, Green Bank, WV -- the first organized search for ETI signals
1961	Devised widely-known Drake Equation, giving an estimate of the number of communicative extraterrestrial civilizations that we might find in our galaxy.
1968	Conceived plans to upgrade the Arecibo telescope to operate at higher radio frequencies
1974	Constructed the "Arecibo Message of 1974" – the first interstellar message transmitted via radio waves from our planet for the benefit of any extraterrestrial civilization. Three additional messages were sent to outer space, utilizing the techniques and methods developed by Dr. Drake: <i>The Pioneer 10 and 11 Plaques</i> (designed by Drake, Sagan, and Sagan), and the <i>Voyager Record</i> on board the Voyager Spacecraft (conceived by Drake and compiled by a host of contributors in addition to Drake) - Co-authored the book <i>Is Anyone Out There?</i> with Dava Sobel Author of over 150 articles and books; guest speaker and invited lecturer at numerous functions and symposia; has been interviewed extensively by the media and appeared in national and international documentaries.
1980	Conceived system of Gregorian reflectors to greatly improve performance of the Arecibo telescope.
2001	2001 Education Prize awarded by the American Astronomical Society.

Professional Associations

Member of the National Academy of Sciences of the U.S.A. (1972)
Member of the International Astronomical Union (1960)
Member of the American Astronomical Society (1958)
- Chairman, AAS Division of Planetary Sciences (1973)
Fellow of the American Association for the Advancement of Science (1986)
- Vice President of AAAS and Chairman Section D--Astronomy (1973)
Fellow of the American Academy of Arts and Sciences
Fellow of the British Interplanetary Society
Member of the Explorers Club and the Society of Sigma Xi

Significant Appointments

Member of three previous National Academy of Sciences/National Research Council (NAS/NRC) Astronomy Survey Committees (the "Whitford Committee", the "Greenstein Committee" and the "Field Committee")
Member of the Astronomy Advisory Committee, National Science Foundation
Member of the Alan T. Waterman Awards Committee, National Science Foundation
Member of Editorial Advisory Board, *The World Book Encyclopedia*
Member of the Editorial Boards, *Science Year* and the *Astrophysical Journal*
Member of the National Advisory Board, Center for National Policy
Chairman, U.S. National Committee for the International Astronomical Union
Chairman of the Board on Physics and Astronomy, National Research Council (1989-92)
President, Astronomical Society of the Pacific (1988-90)

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