

Dr. Carl F. Blackman is a Research Scientist in the Environmental Carcinogenesis Division of the US Environmental Protection Agency. He received his Ph.D. in Biophysics in 1969, performed post-doctoral training at Brookhaven National Laboratory (1969–1970), and joined the EPA in 1970. For many years, Dr. Blackman studied the complexities of electric and magnetic field interactions with biological systems. His work resulted in several discoveries including multiple effect "windows" of intensity and frequency, and the demonstration that the earth's magnetic field was involved in some biological responses to EMF, and he collaborated on the development of mathematical models that are useful to predict EMF conditions that can cause biological responses. He and colleagues, Drs Ubeda and Trillo, discovered that the oncostatic hormone, melatonin, can modulate gap junction intercellular communication and partially oppose the action of known and suspected tumor promoting agents to close this communication. They also demonstrated that the biological action of melatonin can be altered by magnetic field exposure. While at EPA, Dr. Blackman received research support (1989–1998) through an interagency agreement from the US Department of Energy. He is now part of a research group investigating the influence of DNA methylation on the expression of tumor suppressor genes.

Dr. Blackman is one of six founders in 1978 of the Bioelectromagnetics Society, served as president in 1990, and as a member of Editorial Board of the Society's journal for seven terms (14 years). He served on the World Health Organization committee to evaluate the health implications of radiofrequency radiation exposure (Environmental Health Criteria #137, 1993), on a committee of the International Agency for Research on Cancer (IARC) to evaluate the carcinogenic potential of low frequency electric and magnetic fields in 2001 (Volume 80, 2002) and as chair of the genetic studies group of the ANSI/IEEE committee that issued the US 1992 Radiofrequency Radiation exposure guidelines. He has also served on the US National Council of Radiation and Measurement's committee, chaired by Dr. Adey, to evaluate the potential health effects of low frequency electric and magnetic fields.

Dr. Blackman is a member of the American Society for Cell Biology, American Society for Photobiology, the Biophysics Society, Bioelectromagnetics Society, European BioElectromagnetics Association, and the Society for In Vitro Biology. He has co-authored of 56 peer-reviewed publications, 22 book chapters, 54 invited presentations, and 130 abstracts.

Disclaimer: Dr. Blackman has signed the Benevento Resolution as an expression of his own opinion while on temporary leave from his position at the US Environmental Protection Agency; his signature does NOT represent the official opinion of the US Environmental Protection Agency.