

Carl Sagan

Born: November 9, 1934, Brooklyn, New York City, New York, United States

Died: December 20, 1996, Seattle, Washington, United States



Carl Sagan was, and perhaps still is, the most famous scientist in the world. With more than two-dozen appearances on “The Tonight Show with Johnny Carson (Achenbach, 2014)” and his Peabody Award-winning television show, “Cosmos,” he brought science to the people (Head, 2006). From a small boy gazing at the stars from his window to a NASA consultant, he dedicated his life to sharing the belief that “We are made of star-stuff (Sagan and Agel, 1973).”

Early Life

Carl Edward Sagan was born November 9, 1934, in Brooklyn, New York. His family, which soon included younger sister Carol, lived in a small depression-era apartment and, although neither of his parents had attended college, they always emphasized the importance of education. Carl’s intelligence was obvious from an early age (Butts and Schwartz, 2001). As a child, he would look out his bedroom window and ponder the stars. Eager for more, he read about the universe at the library setting himself on the path that would define his life (Head, 2006).

At just 16, Sagan began his degree in Physics at the University of Chicago completing it in 1955. A year later he received a Master’s Degree in Physics from the same school. During his doctoral work in Chicago, he began what would become a lifelong relationship with the National Aeronautics and Space Administration (NASA)



University of Chicago

consulting on various topics. In 1960, he completed his Ph.D. in astronomy and astrophysics (Spangenburg and Moser, 2004) with a dissertation entitled “Physical Study of Planets” in which he discussed the possibility of extraterrestrial life and the conditions required for it to exist (Head, 2006).

Contributions to Science

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Because of this fear, he was active in the movement for nuclear disarmament. He was also an active environmentalist (Spangenburg and Moser, 2004). His 1994 book *Pale Blue Dot: A Vision of the Human Future in Space*, emphasized the fragile state of the environment and the need for sustainable development for humanity’s long-term survival. The need to preserve the Earth was crucial because, although he had long studied and dreamed of the existence of alien life forms, he was skeptical about the possibility of them visiting us (Head, 2006).



“If the greenhouse effect is a blanket in which we wrap ourselves to keep warm, nuclear winter kicks the blanket off.” – Carl Sagan

Sagan is best known for the 14-hour mini-series “Cosmos” which aired on PBS in 1980 (Head, 2006). Co-written by future wife Ann Druyan (Stangenburg and Moser, 2004), the program reached half a billion viewers in 60 countries (Vergano, 2014) and was the highest rated show on PBS up to that time. A book written to accompany the show spent seventy weeks on the New York Times Bestsellers list (Head, 2014). His goal for the show was to “blow people’s minds (Achenbach, 2014, p. 2, para. 10)” and it did.

His Legacy

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Fame did have its downside. As he grew in popularity, Sagan began receiving letters and phone calls from what he called “Fissured Ceramics” or F/Cs, his own term for crackpots (Achenbach, 2014). His refusal to accept so-called evidence of UFOs was even met with death threats (Vergano, 2014). Being a celebrity scientist was also not an easy path to acceptance from his peers. He was not always well thought of by fellow scientists because of his antics on “The Tonight Show”. Although he was nominated for the National Academy of Sciences in 1992, he wasn’t elected as some critics said he hadn’t done enough significant research. He was given an honorary medal for his contributions to public understanding of science in 1994 but the lingering rejection still stung (Achenbach, 2014).

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In December 1994, Sagan was diagnosed with myelodysplasia, a rare bone marrow disease. He received three bone marrow transplants from his sister in April 1995 and appeared to go into remission. However, his good health was not to last and he died of pneumonia on December 20, 1996. He passed away at such a young age that he never retired and remained active up to the end with several articles published after his death (Head, 2006). He left behind five children (Spangenburg and Moser, 2004) and a world of people who felt as his daughter Sasha did, that he had made them feel connected to the universe and that life is an amazing thing (Sagan, 2014).

Reading Comprehension Questions

1. What award did the show “Cosmos” win?
2. Where
3. With what government agency did Sagan serve as a consultant?
4. What
5. According to
6. What causes the surface of Mars to change?
7. What
8. Where can Sagan’s notes and papers be seen?
9. What
10. When

Extension Questions

11. Carl Sagan
12. What projects did Sagan work on with NASA and what was his role in them? Name at least 2.
13. Go to

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