



John B. Charles, Ph.D.

John B. Charles just retired from NASA after nearly thirty-three years as a life sciences investigator and manager, but will continue applying his experience to enabling humanity's future beyond Earth.

John retired as Associate Director of NASA's Human Research Program (HRP) for Exploration Research Planning. From 2012 to 2016, he was Associate Manager for International Science, leading NASA's space life sciences planning for the joint US/Russian one-year mission on ISS, including the Twins Study. From 2008 to 2012 and again from 2016 until November 2017, he was HRP's Chief Scientist, assuring a balanced portfolio of funded research to resolve the greatest risks to humans on space expeditions.

John earned his B.S. in biophysics at The Ohio State University and his Ph.D. in physiology and biophysics at the University of Kentucky. He has been at the Johnson Space Center since 1983, first as a postdoctoral fellow, then as a civil servant. He co-developed the fluid-loading countermeasure to protect Shuttle astronauts from fainting during re-entry and landing, and investigated the cardiovascular effects of space flight using ultrasound, in-flight lower body negative pressure and re-entry data recording on the Shuttle and on the Russian space station *Mir*. He coordinated NASA's biomedical, biological and microgravity investigations as Mission Scientist on *Mir*, on STS-95 (John Glenn's Shuttle flight), and on STS-107 (Columbia's last mission). He also represented the life sciences to NASA's human Mars mission planning activities in the 1990s.

Dr. Charles is a Fellow of the Aerospace Medical Association (ASMA) and has been a member since 1983; he is the 2017-2018 President of its constituent Space Medicine Association. He is also a Full Member of the International Academy of Astronautics (IAA) and co-chaired the 18th IAA "Humans in Space Symposium" in Houston in 2011.

He has published 75 scientific papers and space history articles and has received several professional awards, including the National Space Club and Foundation's Eagle Manned Mission Award (2017), ASMA's "Joe Kerwin" (2011) and "Hubertus Strughold" (2001) Awards, and NASA's Exceptional Service Medal (2000) and Exceptional Achievement Medal (2014).