

John B. Charles, Ph.D., is the Chief Scientist of NASA's Human Research Program (HRP), a position he also held from 2006 to 2012. He provides scientific direction of research and development enabling astronauts to go beyond low Earth orbit and eventually to Mars.

Dr. Charles earned his B.S. in biophysics at The Ohio State University and his doctorate in physiology and biophysics at the University of Kentucky. He came to the Johnson Space Center in 1983 a postdoctoral fellow and became a civil servant in 1985. He is co-developer of the Shuttle-era fluid-loading countermeasure, and investigated the cardiovascular effects of space flight using ultrasound, re-entry data recording and in-flight lower body negative pressure (LBNP) on Space Shuttle astronauts and on crewmembers of the Russian space station *Mir*. He coordinated the NASA-sponsored biomedical, biological and microgravity science investigations as Mission Scientist for NASA-Mir, for STS-95, John Glenn's Shuttle flight, and for STS-107, Columbia's last mission in January 2003.

From 2002 to 2015, he was HRP's Associate Manager for International Science and led NASA's space life sciences planning and international coordination for the joint US/Russian one-year mission on ISS, including the Twins Study.

He is a Fellow of the Aerospace Medical Association and has been a member since 1983. He is a Full Member of the International Academy of Astronautics (IAA) and co-chaired the IAA's 18<sup>th</sup> "Humans in Space Symposium" in Houston in 2011.

He has published over 60 scientific articles, and has received several professional awards.