John B. Charles, Ph.D

John B. Charles, Ph.D., is the Chief Scientist of NASA’s Human Research Program (HRP), responsible for the scientific direction of research and development enabling astronauts to go beyond low Earth orbit and eventually to Mars. Previously he was HRP’s Associate Manager for International Science and led NASA’s space life sciences planning for the joint US/Russian one-year mission on ISS and the Twins Study.

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 on Space Shuttle astronauts and on crewmembers of the Russian space station *Mir*. He coordinated all of the NASA-sponsored biomedical, biological and microgravity science investigations as Mission Scientist for American astronaut missions on *Mir*, on STS-95, John Glenn’s Shuttle flight, and on STS-107, Columbia’s last mission in January 2003.

He is a Fellow of the Aerospace Medical Association and has been a member since 1983. 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 over 60 scientificarticles and has received several professional awards.