Journal of Vestibular Research 13 (2003) 153
IOS Press

Introduction

Sixth Symposium on The Role of the Vestibular Organs in the Exploration of Space

Portland, OR, USA
September 30–October 3, 2002

From 1965 through 1970, the National Aeronautics and Space Administration (NASA) sponsored a series of symposia on The Role of the Vestibular Organs in the Exploration of Space. This Sixth Symposium focused on microgravity as an essential environment for the study of fundamental vestibular functions. The Symposium participants addressed the perplexing problem of how to understand and ameliorate the adverse physiological effects on humans resulting from the reduction of gravitational stimulation of the vestibular receptors in space. Targeted participants included students, postdoctoral fellows, and young scientists, in addition to established scientists interested in or actively participating in space-related vestibular research. The three-day meeting included presentations on: historical perspectives and findings, vestibular neurobiology, neuroanatomy, neurotransmitter systems, theoretical considerations, vestibular neurophysiology, clinical issues, spatial orientation and psychophysics, motor integration and adaptation, autonomic function and space motion sickness, and countermeasures and rehabilitation. NASA flight surgeons, who deal directly with clinical and operational problems posed by microgravity environments, described in detail problems they face in dealing with crew safety, health and well being. These issues along with more specific recommendations arising from the above discussions will be more thoroughly addressed in the meeting transactions scheduled for publication later this year. One hundred twenty participants from 12 countries presented 70 papers and posters, 21 of which appear in this special issue of The Journal of Vestibular Research. Topics presented herein include 1) theoretical considerations, 2) otolith physiology and function, 3) spatial orientation and 4) adaptation.

The Symposium planning committee gratefully acknowledges support from The National Institute on Deafness and Other Communicative Disorders (NIDCD), National Aeronautics and Space Administration (NASA), the National Space Biomedical Research Institute (NSBRI), and the Legacy Clinical Research and Technology Center Research Advisory Committee. Scott J. Wood designed the meeting logo and provided invaluable logistics and other assistance to the committee.

F. Owen Black
William H. Paloski
Organizing Committee Co-Chairs

ISSN 0957-4271/03/$8.00