Introduction

Seventh Symposium on the Role of the Vestibular Organs in Space Exploration Noordwijk, The Netherlands, June 7–9, 2006

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The Seventh Symposium on the Role of the Vestibular Organs in Space Exploration was held at the European Space Technology Centre (ESTEC), in Noordwijk, The Netherlands, on June 7–9, 2006. The host for this conference was the European Space Agency (ESA). The conference was co-sponsored by the National Aeronautics and Space Administration (NASA) and the National Space Biomedical Research Institute (NSBRI).

There have been six previous NASA-sponsored symposia in this series. Written proceedings of the first five symposia, held between 1965-1970 in Pensacola, Florida, are available from the NASA Technical Reports Server (http://ntrs.nasa.gov/search.jsp, and enter "Role of Vestibular Organs" as the search term). The Sixth NASA Symposium was held in Portland, Oregon in 2002. The program and abstracts from this meeting were published by the Journal of Vestibular Research as part of Volume 11 (3-5); these abstracts can be accessed through the IOS Press web site (http://iospress.metapress.com/home/main.mpx). In addition, most of the papers from the Sixth Symposium were submitted to the Journal of Vestibular Research and appear as Volume 13 (4-6).

Each of the seven Symposia on the Role of the Vestibular Organs in Space Exploration address the adverse physiological effects mediated by the vestibular system in humans exposed to microgravity. A European venue was particularly appropriate for the Seventh Symposium, since the space neurovestibular field has become increasingly international. Researchers from many countries have had the opportunity to conduct experiments on the Russian Mir station, the US Space Shuttle, and the International Space Station. Symposium participants included more than one hundred scientists, flight surgeons, postdoctoral fellows and students from Europe, the US, Canada, Russia and Japan. It was an exciting three day meeting: More than 50 platform presentations and 20 posters were presented, describing results from investigations in spaceflight, parabolic flight, and ground laboratories. Session topics included the vestibulo-ocular reflex, clinical assessment of vestibular disorders, neurophysiology, spatial orientation, spaceflight countermeasures, balance and locomotion, motion sickness, otolith and semicircular canal physiology, and artificial gravity. The meeting concluded with an international panel discussion on challenges and opportunities in space research.

We would like to thank the Journal of Vestibular Research for this Special Issue devoted to papers presented at this Symposium. We would also like to thank the presenters who submitted full papers, which underwent peer-review, for this special issue. The web site for the Symposium (http://www.congrex.nl/06a07/) contains the full scientific program; many of the slide presentations and posters are also available at this web site. This Symposium was organized by a committee consisting of Drs. Patrik Sundblad, Charles Oman, Eberhard Horn, Marc Heppner, Laurence Young, William Paloski and Owen Black. We thank the Symposium's international scientific program committee which peer reviewed the large number of abstracts. Finally, the ESA Conference Bureau, led by Yolanda Spaans, gracefully handled the myriad details of hosting the conference, allowing all of us to concentrate on our science.

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