

FOREWORD

When writing the Foreword for the Proceedings, two alternatives were at disposal. Either to derive general conclusions using as background the presented papers or to point out to important issues facing all those who are involved, in one way or the other, with the rehabilitation of the handicapped. The second alternative seemed to be more relevant at this hour.

It would be wrong to say that there was no concern at all in the past about the fact that the development of externally powered assistive systems and the research in functional stimulation have been going their own ways. As a matter of fact, the need for hybrid systems, where externally controlled assistive equipment supports functional stimulation, was stressed just at a Dubrovnik Conference, some years ago. However, it turned out that the realization of hybrid assistive systems is a much more difficult task than thought of at the first sight. This will become more obvious at the current Meeting where a rather simple hybrid assistive system will be presented. One can only hope that this new trend, aiming at the integration of two different rehabilitation technologies, will cover in the future a broader spectrum of applications than each of the approaches taken by itself.

The transfer of advanced technology into the rehabilitation field is another example of a highly complex activity. We all know now that out of so many excellent ideas, contributions and feasibility studies not too many of them have reached the level of field applications. Various reasons have contributed to this state of affairs. At this place, it is important to point out to an activity which could speed up significantly the transfer of research results all the way down to the field use. Namely, due to the pronounced multidisciplinary nature of the rehabilitation medicine and to the fact that so many outstanding groups, scattered all

around the world, are making valuable contributions in this area, the need for efficient international coordination and management of technology transfer is strongly felt. Consequently, more human and other resources, should be dedicated to integrate and to direct the work in rehabilitation research at the international level.

It is also high time to dedicate full attention to another important issue of rehabilitation research. In the early stages of rehabilitation engineering it was understandable that certain pioneering accomplishments have attracted broad attention. On the other hand, proper assessment of rehabilitative and technical constraints, inferent to various assistive techniques was not discussed adequately from the very beginning. With the body of knowledge which is at our disposal today, we all must feel it as our professional and ethical commitment to speak clearly and openly about limited potential of respective rehabilitative techniques. Only in this way the obstacles preventing broader applications of advanced assistive systems can be truly overcome.

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