

**NIH
GAIT RESEARCH
WORKSHOP**

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APPLIED PHYSIOLOGY AND
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GAIT RESEARCH WORKSHOP

Children's Hospital Health Center

San Diego, California

March 9, 1977

Chairman: Dr. John V. Basmajian

Sponsored by

APPLIED PHYSIOLOGY AND ORTHOPEDICS STUDY SECTION

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PURPOSE OF WORKSHOP

The aim of this Workshop was to examine the current status of gait-locomotion research in man and other vertebrates. NIH applications in this area are reviewed by the Applied Physiology and Orthopedics Study Section and members have viewed the continuing proliferation of Gait Laboratories with some concern. Are all these expensive installations really necessary? Are they being used primarily as pre- and post-surgery diagnostic tools? How much sound and necessary research is being performed in these installations? What research problems have been solved with this tool? What remains to be solved? The range of concerns of the Workshop, therefore, extended from the theoretical concepts underlying the recording and analysis of gait patterns, to the potential application of these techniques to basic and clinical research and to direct applications in the clinical setting. It was hoped that the interaction of the panelists would produce a clear picture of the directions that the field is taking and would help to establish priorities regarding present and future needs. In addition to the members of the Applied Physiology and Orthopedics Study Section (NIH), ten authorities currently working in locomotion research were invited to participate. Papers were presented by six of these invited participants and these form the basis of this Proceedings. Condensed discussion is included to illustrate the trends of the interaction and the conclusions that the Workshop participants reached.

AGENDA

MORNING PROGRAM

1. Dr. David Chadwick Welcome on behalf of Children's Hospital
2. Dr. Morris Milner An Overview of the Current Status of Existing Gait Laboratories
3. Dr. Sheldon Simon Techniques in Gait Research and Management of Data
4. Dr. David H. Sutherland The Value of Normative Data in Gait Analysis
5. Discussion

AFTERNOON PROGRAM

6. Dr. Jacquelin Perry Clinical Use of Gait Analysis
7. Dr. M. Patricia Murray Normative Data Collection in Adults and Evaluation of Hip & Knee Prosthetic Replacements
8. Dr. Edmund Y.S. Chao Justification of Goniometric Method as a Means to Evaluate Joint Replacement Patients.
9. Discussion and Summary

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A Subcommittee of the Applied Physiology and Orthopedics Study Section made arrangements to hold this Workshop at San Diego in early 1977 and Dr. Wayne Akeson, University of California, San Diego, invited participants and served as Local Chairman. His careful consideration of details culminated in a most productive meeting and an opportunity for specialists in the gait field to exchange pertinent information. The Medical Director of Children's Hospital, Dr. David Chandler, and Dr. David Sutherland deserve thanks for the excellent meeting facilities that they provided at Children's Hospital. Dr. John Basmajian skillfully chaired the Workshop, eliciting discussion on all major issues about which the Study Section had expressed concern. The six speakers spent a great deal of time preparing their excellent papers and re-editing them later for publication. Their research results and opinions form the framework of the Workshop. In particular perhaps, Dr. Morris Milner should receive commendation for conducting a questionnaire survey, in advance of the Workshop, to obtain up-to-date data regarding existing gait laboratories in the United State and abroad. This information is included in his Proceedings paper. Ms. Patricia Digges, DRG, NIH, is to be commended for her careful typing of the Workshop Proceedings.

Copies of the Proceedings may be obtained by writing to: Office of Grants Inquiries, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014. Please quote the publication number that appears on the back cover.

March 1978

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