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INTRODUCTION

This issue constitues the twenty-third annual report of our Research Institute.

The period covered by this issue has been a year of change at our Institute. Last April, after the retirement of Prof. Masayuki Sawashima, Dr. Seiji Niimi, the former associate Professor of the Section of Speech Physiology, was promoted to Professor of Speech Physiology. Last December, Dr. Yoko Fukusako became an associate Professor of Speech Pathology at our Institute. Dr. Fukusako had been in charge of the Section of Speech Pathology at the Metropolitan Medical Center of Gerontology. We expect both Dr. Niimi and Dr. Fukusako to contribute to the further development of our Research Institute.

Since we had many papers from outside in the last issue of our Annual Bulletin dedicated to Prof. Sawashima at his retirement, we limited the number of internal reports from our Institute. In this issue, we are pleased to include as many papers as possible submitted from our Institute. Our research results are reported here mostly in preliminary form for exchange of information and cooperative technical discussions with other research groups all over the world. Most of the projects reported on here are expected to appear in more formal publications later, but quotations are welcome strictly for research purposes, with the understanding of the preliminary nature of these reports.

Our research projects are principally supported by Grants-in-Aid for Scientific Research, from the Ministry of Education, Science and Culture, including Grants-in-Aid for Scientific Research on Priority Areas: Advanced Man-Machine Interface Through Spoken Language (No. 63608002), Basic Research for Advancement of Language Processing (No. 63608002) and others (No. 62480354, No. 63304048 and No. 63480377).

Hajime Hirose

Director

PERSONNEL

(April 1988 - March 1989)

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Professor Emeritus:
     Ichiro Kirikae (D.M.Sc.)
     Masayuki Sawashima (D.M.Sc.)
Director: Hajime Hirose
Research Staff:
     Hajime Hirose (D.M.Sc.) Professor of Speech Pathology
     Shigeru Kiritani (D.M.Sc.) Professor of Speech Science
     Seiji Niimi (D.M.Sc.) Associate Professor of Speech Physi-
       ology
              Imaizumi(D.Eng.) Associate Professor of Speech Sci-
     Satoshi
       ence
     YohkoFukusako (D.M.Sc) Associate Professor of Speech Patho-
       logy (Dec. -)
     Kenji Itoh (D. Eng.) Research Associate
     Sotaro Sekimoto (B. Eng.) Research Assistant (Jan. -)
     Kohichi Tsunoda (M.D.) Research Assistant
     Satoshi Horiguchi (M.D.) Research Assiatant
Graduate Students:
     Michiko Mochizuki-Sudo (M.A.)
     Yukie Masuko (M.A.)
     Akiko Yamada-Hayashi (M.A.)
     Yan Qun (B.L.)
Special Students:
     Kiyoshi Makiyama (M.D.)
     Reiko Mazuka (M.A.) (Nov.-)
     Junichi Shimada (M.D.)
     Hiroya Yamaquchi (D.M.Sc)
     Yohko Watanabe (B.A.)
Guest Researchers:
     John A. Bisazza (Ph.D.) Assistant Professor, Department of
       Literature, Meijigakuin University
     Morio Kohno (Ph.D.)
Technical Staff:
     Hiroshi Imagawa (B. Eng.)
     Fumihiro Suzuki (part time)
Secretaries:
     Miss Kikuko Yamakoshi
     Mrs. Mieko Tanaka (part time) (-Apr.)
     Miss Noriko Tsunoda (part time)
     Miss Hiroko Yamane (part time)
     Miss Yohko Tamaki (part time) (May-Jul.)
     Miss Katsumi Yoshida (part time) (Aug. -Oct.)
     Miss Hiroko Akutsu (part time) (Dec.-Feb.)
     Miss Minobu Managi (part time) (Feb. -)
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Miss Maki Suzaki (part time) (Feb.-Mar.)

Cooperative Groups:

University of Tokyo, Faculty of Medicine, Department of Otolaryngology, Voice and Speech Group. University of Tokyo, Faculty of Engineering, Department of Electrical Engineering. Kogakuin University, Department of Electronic Engineering. Kitasato University, School of Medicine, Department of Physiology. Department of Otolaryngology. University of Electro-Communications, Department of Computer Science and Information Mathematics. Waseda University, School of Science and Engineering. Tokyo University of Foreign Studies, Institute for the Study of Languages and Cultures of Asia and Africa. University of Tsukuba, Institute of Human Sciences. National Rehabilitation Center for the Disabled, Department of Speech and Hearing Disorders, and of Otolaryngology. Tokyo Metropolitan Institute of Gerontology, Department of Rehabilitation Medicine. Section of Communication Research. Tokyo Metropolitan Geriatric Hospital, Department of Speech Pathology. Osaka Shoin Women's College. National Language Research Institute, Center for Teaching of Japanese as a Foreign Language. Tokyo Senbai Hospital, Department of Otolaryngology.