

JULY 1979 VOLUME 16, NUMBER 3

### TABLE OF CONTENTS

| AN ANATOMICAL STUDY OF THE COLUMELLA AND THE PROTRUDING PREMAXILLAE IN A<br>BILATERAL CLEFT LIP AND PALATE INFANT   |            |
|---|------------|
| B. F. King, III, D.D.S., M.S., C. H. Workman III, M.D. and<br>R. A. Latham, B.D.S., Ph.D.   | 223        |
| PATTERNS OF ARTICULATION ABILITIES IN SPEAKERS WITH CLEFT PALATE<br>D. R. Van Demark, Ph.D., H. L. Morris, Ph.D. and<br>C. VandeHaar, M.A.  | 230        |
| The Minimal Cleft Lip Revisited: Clinical and Anatomic Correlations   | 200        |
| Frederick R. Heckler, M.D., Larry G. Oesterle, D.D.S. and<br>Michael E. Jabaley, M.D.   | 240        |
| Induction of Craniofacial Malformations in Rhesus Monkeys (Macaca mulatta) with Cyclophosphamide  |            |
| Harold M. McClure, D.V.M., Ann L. Wilk, Ph.D.,<br>Elizabeth A. Horigan, B.S. and Robert M. Pratt, Ph.D.   | 248        |
| SELF IDENTIFIED PERSONALITY PATTERNS OF CHILDREN WITH FACIAL OR ORTHOPEDIC DISFIGUREMENT  |            |
| Lynn C. Richman, Ph.D. and Dennis C. Harper, Ph.D.  | 257        |
| Perceptual Preferences between Compensatory Articulation and Nasal Escape of<br>Air in Children with Velopharyngeal Incompetence  |            |
| Earlene Tash Paynter, Ph.D. and Marty W. Kinard, M.S.   | 262        |
| A ROENTGEN STEREOPHOTOGRAMMETRIC STUDY OF IMPLANT STABILITY AND MOVEMENT OF<br>SEGMENTS IN THE MAXILLA OF INFANTS WITH CLEFT LIP AND PALATE<br>Bodil Rune, D.D.S., Sten Jacobsson, M.D., Karl-Victor Sarnäs, D.D.S.           |            |
| and Göran Selvik, M.D.  | 267        |
| PERCI: A METHOD FOR RATING PALATAL EFFICIENCY<br>Donald W. Warren, D.D.S., Ph.D.  | 279        |
| CLINICAL CONFERENCE: CASE REPORT FOR SYNDROME IDENTIFICATION<br>Wendell Wong, M.D., M. Michael Cohen, Jr., D.M.D., Marilyn Miller, M.D.,<br>Samuel Pruzansky, D.D.S., Ira M. Rosenthal, M.D.<br>and Lawrence M. Solomon, M.D. | 286        |
| THE CRANIOFACIAL COMPLEX IN CLEFT LIP AND PALATE: AN UPDATED REVIEW OF  |            |
| Anatomy and Function  |            |
| Wilma Maue-Dickson, Ph.D.   | 291        |
| BOOK REVIEWS  | 318        |
| Abstracts   | 323        |
| A Reprint of the Abstracts from the Program of the Combined Meeting of the<br>American Cleft Palate Association and the American Cleft Palate Educa-  | 000        |
| TIONAL FOUNDATION   | 333<br>346 |
|   |            |





### AMERICAN CLEFT PALATE ASSOCIATION 1979–1980 OFFICERS

| President            | Ralph L. Shelton, Jr., Ph.D., Tucson, Arizona          |
|----------------------|--|
| President Elect      | William C. Trier, M.D., Chapel Hill, North Carolina    |
| Past President       | R. Bruce Ross, D.D.S., M.Sc., Toronto, Canada          |
| Vice President       |  |
| Vice President Elect | George J. Chierici, D.D.S., San Francisco, California  |
| Secretary            | David R. Dickson, Ph.D., Miami, Florida                |
| Treasurer            | Albert H. Guay, D.M.D., Wakefield, Massachusetts       |
| Editor               | Betty Jane McWilliams, Ph.D., Pittsburgh, Pennsylvania |
| Historian and        |  |
| Editor of Newsletter | Elise Hahn, Ph.D., Los Angeles, California             |

# COUNCIL MEMBERS

| Sally Peterson-Falzone, Ph.D. (1980)   | Chicago, Illinois           |
|--|-----------------------------|
| Donald W. Warren, D.D.S., Ph.D. (1980) | Chapel Hill, North Carolina |
| Donnell F. Johns. Ph.D. (1981)         | Dallas, Texas               |
| Hermine Pashayan, M.D. (1981)          | Boston, Massachusetts       |
| William E. La Velle, D.D.S. (1982)     | lowa City, Iowa             |
| Libby F. Wilson, M.D. (1982)           | Downey, California          |
| Joyce C. Heller, Ph.D., Ex Officio     | Union, New Jersey           |
| Donna R. Fox, Ph.D., Ex Officio        | Houston, Texas              |

#### ADMINISTRATIVE SECRETARY

Mrs. Flora P. Berk 331 Salk Hall University of Pittsburgh Pittsburgh, Pennsylvania 15261 Telephone: 412-681-9620

#### **GENERAL INFORMATION**

The Cleft Palate Journal is a quarterly publication of the American Cleft Palate Association. It appears in January, April, July, and October and is printed by Waverly Press, Inc., Mt. Royal and Guilford Avenues, Baltimore, Maryland 21202. Second Class postage is paid at Pittsburgh, Pennsylvania, and at additional mailing offices.

Manuscripts and related correspondence should be addressed to Betty Jane McWilliams, Ph.D., Editor, Cleft Palate Journal, Cleft Palate Center, University of Pittsburgh, Pittsburgh, Pennsylvania 15261. More detailed "Information to Contributors" will be found inside the back cover.

Material contained in the *Cleft Palate Journal* may be reproduced for educational purposes provided that both the author/s/ and the *Journal* are appropriately recognized; otherwise, duplication is not permitted. No articles or portions thereof may be published in books, journals, or magazines or by any other means without written permission from the authors and from the *Cleft Palate Journal*.

Subscription rates, effective January, 1977, are \$35.00 per calendar year both in the United States and abroad. Single copies are available at \$9.00 per issue.

Subscriptions, orders for back copies, and business correspondence should be addressed to Mrs. Flora P. Berk, Administrative Secretary, American Cleft Palate Association, 331 Salk Hall, University of Pittsburgh, Pittsburgh, Pennsylvania 15261. Address changes should be sent to the Administrative Secretary at least one month prior to the change. Subscribers and ACPA members must notify the Post Office that they will guarantee postage for the forwarding of undelivered copies. Other claims for undelivered copies must be filed within one month of the expiration of the subscription year.





EDITOR

BETTY JANE McWILLIAMS, Ph.D. Cleft Palate Center University of Pittsburgh Pittsburgh, Pennsylvania 15261

EDITORIAL ASSISTANTS

PRESTON A. WILSON HELEN BAUM

STATISTICAL CONSULTANT

SECTION EDITORS Anatomy and Embryology Basic Science Clinical Genetics and Pediatrics Dentistry Otolaryngology Plastic Surgery Radiology Speech and Behavioral Sciences Teratology Clinical Conferences Book Reviews

Abstracts Advertising ALPHONSE R. BURDI, Ph.D., Ann Arbor, Michigan DAVID R. DICKSON, Ph.D., Miami, Florida HERMINE PASHAYAN, M.D., Boston, Massachusetts

FLOYD H. TAYLOR, Sc.D. Pittsburgh, Pennsylvania

CHARLES R. KREMENAK, JR, D.D.S., Iowa City, Iowa CECIL W. HART, M.D., Chicago, Illinois WILLIAM C. TRIER, M.D., Chapel Hill, North Carolina M. LEON SKOLNICK, M.D., Pittsburgh, Pennsylvania DUANE R. VAN DEMARK, Ph.D., Iowa City, Iowa

JOSEF WARKANY, M.D., Cincinnati, Ohio SAMUEL PRUZANSKY, D.D.S., Chicago, Illinois JEANETTE K. LAGUAITE, Ph.D., New Orleans, Louisiana R. BRUCE ROSS, D.D.S., Toronto, Ontario, Canada BARD COSMAN, M.D., New York, New York RICHARD P. JOBE, M.D., Los Altos, California

The Cleft Palate Journal is an international publication designed to reflect research and clinical activities in the many fields concerned with the study and treatment of cleft lip and cleft palate, other craniofacial anomalies, and related problems.

Changes of address and subscription orders may be placed with: American Cleft Palate Association, Mrs. Flora P. Berk, Administrative Secretary, University of Pittsburgh, Pennsylvania 15261.

Manuscripts and correspondence should be submitted to the editor

Copyright © 1979 The American Cleft Palate Association Published quarterly by the American Cleft Palate Association Printed by Waverly Press, Inc., Mt. Royal & Guilford Avenues, Baltimore, Maryland 21202 Subscription rate: \$35.00 per volume, \$9.00 per issue Second class postage paid at Pittsburgh, Pa. and at additional mailing offices



## AMERICAN CLEFT PALATE EDUCATIONAL FOUNDATION 1979–1980 OFFICERS

| President            | Joyce C. Heller, Ph.D., Union, New Jersey         |
|----------------------|---|
| President-Elect      | Sylvan E. Stool, M.D., Pittsburgh, Pennsylvania   |
| Vice-President       | Richard M. Cole, Ph.D., Detroit, Michigan         |
| Secretary            | Donna R. Fox, Ph.D., Houston, Texas               |
|                      | Alphonse R. Burdi, Ph.D., Ann Arbor, Michigan     |
|                      | Jel Berkowitz, D.D.S., M.S., South Miami, Florida |
| Historian and        |   |
| Editor of Newsletter | Elise Hahn, Ph.D., Los Angeles, California        |

### **BOARD MEMBERS**

| Mary Pannbacker, Ph.D. (1980)            | New Orleans, Louisiana     |
|--|----------------------------|
| Lory Roston, M.B.A. (1980)               | New York, New York         |
| Mohammad Mazaheri, D.D.S., M.S. (1981)   | Lancaster, Pennsylvania    |
| Linton A. Whitaker, M.D. (1981)          | Philadelphia, Pennsylvania |
| Leslie M. Holve, M.D. (1982)             | Santa Monica, California   |
| Michael L. Lewin, M.D. (1982)            | Bronx, New York            |
| Ralph L. Shelton, Jr., Ph.D., Ex Officio | Arizona                    |
| David R. Dickson, Ph.D., Ex Officio      | Miami, Florida             |

## FUTURE ACPA MEETINGS

1980

Lancaster, Pennsylvania, Host Farm, May 12-15

1981

Fourth International Congress, Princess Hotel, Acapulco, Mexico, May 3–9

> 1982 Denver, Colorado, Hilton Hotel, April 19-24

1983 Indianapolis, Indiana, Hyatt Regency, May 2-8